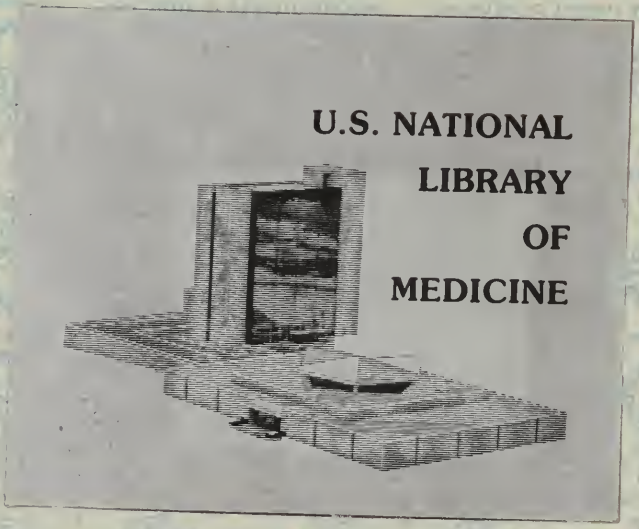

THE MODERN BABY,

THE ART OF NURSING AND RAISING CHILDREN.

THE MODERN BABY

OR

THE ART OF NURSING and RAISING CHILDREN.

A Popular Treatise.

BY

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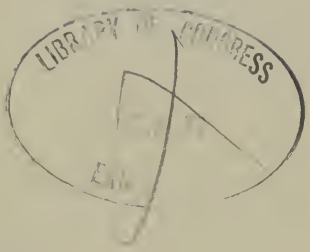

PREFACE.

It is not my intention in publishing this little volume to present to the public, strictly speaking a scientific work, nor is it to be considered a commercial enterprise.

The purposes of this publication are, to propagate moral and social teaching, to instruct and enlighten the masses on a subject in which every person is interested, and to which I invite the attention of mothers and fathers, a subject wherein the entire populatiou of the United States is concerned.

A vast number of newly born succomb annually, that do not die of any sickness or disease. Most of them die in consequence of the errors, serious faults committed against hygien. To teach mothers how to raise their children, is one of the best means to diminish the mortality among them, which, after all, can only be regarded as an outrage against humanity, morality, and society.

This is not the proper time, nor the right place to enter into statistics, theories or argument of political economy—surplus population, nor the barbarous practices resorted to, by very many intelligent persons, I am sorry to say, in destroying these innocent beings. It is not for us to destroy or to select—leave that to nature, she will do it—and is doing it, far more wisely—efficiently and effectually.

What we are chiefly concerned in, is to advise and instruct young mothers, in the art of raising their children, when once these little innocence have come into existence, the thousands of newly born that perish amongs us daily, will be preserved to life—to their families to society and to the nation.

Treatise have been written on the art of raising dogs, horses, rabbits, birds, etc. The purchasers of these, always look upon it as a good investment and a profitable one. Why not write on the art of raising children? and make them useful men and woman. Who can tell, who knows? what destiny awaits them, how useful they might have been to their fellowmen and to their country? That is a subject for reflection.

It will be conceded, that the true cause of mortality in early infancy is due to the inexperience of mothers and nurses, ignorant of the care and attention to be given to the newly born. There are still existing prejud.ces serious faults against cleanliness, hygien, which also contributes its mite to the annual victims. A large number of the skin-diseases among children are due to filth; many cerebral affections are due to the milk scale or tetter—scabs on the head—and for which many old fashioned people have a kind of veneration. Foreigners who are so strongly attached to feather beds—upon which infants are made to lie —make them so suseptible to cold, become rachitic or engender some other trouble.

The feeding of infants is no small evil—how many children die because they eat too much, or because they eat too soon.

It is therefore to the interest of every mother—more especially every young mother—to inform herself—and it is for that purpose this useful little work is presented to them and to the public.

If these pages shall be the means to preserve to life and health some few of the newly born—the aim and the object of the author shall have been attained.

J. H.

The Modern Baby.

CHAPTER I.

SIZE OF THE INFANT.

The body of the newly born at the moment of birth, varies in length from about 16 to 21 inches. The male infant generally measures one inch and a quarter more than the female ; the infant at the time of birth is about one-third the size of its definitive growth, it increases in size during the first month about one and a quarter to one-half inches in length, one inch for the second month, five-eights of an inch for the third, and one-quarter to three-eights for the following months. The child increases in size during the first year about seven and a half inches, for the second year three and five-eights inches, for the third year two and three-fourths inches, for the fourth and fifth about two and a half inches, and in the six following years about two and one quarter inches a year. The size of the child doubles itself during the first six years.

An insufficient alimentation, scrofulous bones, retards the growth ; a too rapid growth enfeebles the child, makes it pale and thin.

THE WEIGHT OF THE INFANT.

The weight of the infant at birth varies from five to nine pounds, and, on an average, of about six and a half pounds at the time of birth. The male infant weighs more than the female, there being a difference of, from about four to eight ounces.

Immediately after birth, the child looses weight in consequence of the evacuations of meconium and urine, thus the elimination by the skin and lungs, a loss not counterbalanced by the alimentation, which is not yet very abundant. The diminution of weight continues for about the first three or four days of its life. The loss is in all about three to four ounces. Frequently, on the first day, the diminution of weight is three and a quarter ounces., and ceases to loose about the third or fourth day ; then the infant commences immediately to increase, and attains its original weight about the tenth day, if it is nourished at the breast, a little later if nourished artificially. The average increase of weight is from three-fourths to 1 ounce per day during the first five months of its existence.

ATTITUDE.

The newly born conserves after its birth a flexion of its limbs forward, of the head and trunk, resembling the attitude of the little one in the maternal bosom ; all its movements appear at first purely automatic, little by little it takes on movements of a volutary character. The hand does not delay long in seizing objects which are presented to them or place it upon the bosom of the nurse. The babe instinctively places its hand upon its mother's breast and gently strokes it. This mild irritation is not without a purpose, for as the nursling lies peace-

fully smiling and feeding playfully stroking the nurse's breast—it makes the milk flow more readily, thus satisfying more amply its immediate want. It is not until towards the second month that the child commences to sustain its head, which, too heavy vascilated up to this time upon the neck. At the fourth and fifth month the child sustains it sitting; at seven and eight months the child moves it in every direction with facility. Toward the eight or ninth month only, the child tries to sustain itself upon its limbs. Very many do not walk before a year.

THE COLOR OF THE INTEGUMENT.

After confinement, the face of the newly born is of a dark red, a little purple; from the third to the fifth day, the general redness is replaced by a yellowish tint; this is more or less intense in proportion as the primitive red coloration was more or less dark; at the end of a few days a general rosy tint more intense on the cheeks than elsewhere, makes its appearance. At the end of two or three months only the proper color of each constitution manifests itself, and then one is able to distinguish brunette children from blonde. These shades are singularly influenced by race, by insolation, by temperature and habitation, Thus, children of the city, conditions being equal, are more pale than nurslings of the country.

The coloration of skin also varies in the different diseases, as in lung diseases, etc. The normal rose color or dark red is replaced by a peculiar paleness, etc.

THE PHYSIOGNOMY.

When the newly born is in good health and nothing agitates it, the face is without any particular

expression, except that of perfect calm and tranquility ; no movement whatever, no wrinkle and no fold is to be noticed ; it is full, round, the mouth is firmly closed and the child respires freely by the nose. Very seldom that a child smiles before it is three weeks old. Indeed it does not begin to smile before it is a month old ; the eyes that move during the first few days in every direction without any determined aim, become very sensible to daylight at the end of two weeks, and its attention appears to become fixed, recognizes somewhat surrounding objects at the age of about six weeks or two months.

Pain and sickness alter the features of the newly born. For an instance, under the influence of a passing colic, the face becomes wrinkled contracts and the child cries, and so on with other disease, which is not my purpose to discribe in this treatise.

SLEEP.

The Innocent and Healthy Sleep.

A child in perfect health during the first month, when abundantly nursed at a wholesome breast, sleeps usually twenty out of the twenty four hours, wakes to nurse every two or three hours and twice or three times during the night. As the child grows older, the second and third month or so, it becomes much more wakeful, though it will usually take a nap of several hours in the morning and a shorter one in the afternoon, while it will sleep from early evening until the following morning—probably waking once or twice to nurse.

The sleep of a healthy child is tranquil, the features are in repose, the expression of countenance, attitude, breathing—all indicates the undisturbed

peaceful and most perfect ease, suggests of the comfort, composure, and well being—as well as the graceful posture of a naturally healthy child during its sleep.

It requires but a very slight disturbance in the health of a child, to break the ordinary calm, peaceful sleep to make it restless, fitful, fretful, interrupted by startings, cries and dreams ; very little irritation in the digestive canal, imperfectly digested food, irritation of the gums at the time of teething, worms, slight fever, are sufficient to disturb the slumbers of the infant, and indicate the first signs that something is wrong.

In proportion as the cause of the disturbance is severe, the indications will vary—the uneasy sleep —the disturbed countenance, the contraction of the brow, working at the features, tossing, the frequent changing of position, the broken sleep, the difficulty to lull it to sleep, the persistent wakefulness, painful dreams or nightmare causing the little one to scream and struggle in its sleep, waking in a most terrible fright, occasionally they will no longer sleep in the bed or crib, the nurse or mother is obliged to get up and walk with them, or sooth them by movements of a rocking chair or cradle. Whenever any of these disturbances occur—it behooves the mother or nurse to become watchful and vigilant, exercise that patience, indulgence care sweetness and mildness of temper, good mothers have so well deserved the name of ministering angels,—seek to relieve the infant by removing the cause of the disturbing element.

THE CRY.

The so-called cry proper of the newly born always takes place during expiration, sometime a second

cry is noticed, a repetition, but it is neither so strong nor prolonged as the first.

The first cry of the newly born is probably due to the disagreeable impression the air makes upon the exterior surface of the body, it is always sustained, sonorous and easy among infants born alive.

During the first few months of its life, the infant cries under the influence of divers causes, it is therefore important to be able to distinguish and recognize them. The cry of a newly born might be due to the ill effects of too tight bandaging or that its bed is not well arranged; all that is necessary then is to accommodate the little one, relax the clothing or rearrange the bed to calm it. The cry of hunger is only reproduced by the infant every two hours, but when the hours of its repast is regulated, and it has become habituated to sleep in its bed without having recourse to that evil habit of cradling, rocking or being carried in the arm of its nurse; bad children, that notwithstanding, they are in perfect health, cry at every instance and on all occasions, are almost always children badly raised.

The cry of pain is distinguished from the ordinary cry – that it does not cease when you try to amuse the child or pacify it—by changing its position or by giving it the breast. An excellent means has been suggested, whereby to distinguish between the two cries, that is, expose the infant to light; if the cry is only caprice, you will see the child open its eyes wide, becomes instantly calm and allows itself to be fondled, without manifesting either impatience or anger; if the cry is provoked by colic, which is often the case, the light will no longer appease it and it becomes much more acute every time you press upon the abdomen. Another proceeding to which the nursling will frequently cede its cries of

anger, consist in gently caressing the top of the head from the back forward. The repetition of several of these gentle and uniform frictions, until the face of the child assumes its ordinary aspect.

Infants do not begin to secrete tears until the third or fourth month, consequently can furnish no sign before that time.

The cry varies also, depending upon the disease the child is laboring under. The cry may be incomplete, acute, feeble children that are bred either wholly or partially on artificial diet, and who are frequently troubled with disordered bowels, and who, in consequence, have to be medicated, and as it frequently happens—the medication makes it still worse. What other means has the child to make its complaint? Ignorance, negligence, pride, cupidity and stupidity all work harmoniously; not only to make the baby cry but to make it sick. Supply the infant with proper nourishment; stop your drugs and you will stop the cry. It will be healthier for the baby and more comfort to yourself.

THE FONTANELS.

In the newly born the skull is not completely developed in its bony structure. Not only are the bones of the head very delicate, but there are certain places where the angles at the bones that go into the formation of the skull,—do not meet—a gap is left in consequence. This gap is covered by a membrane, which later in life becomes bony and intimately united. These gaps are called fontanels. The anterior fontanel is irregular a lozenge shaped, is situated almost immediately above the forehead, requires only a very delicate touch to feel it; on the back part there is also one of a triangular shape,

and right in the centre of the skull where the bones of the side of the head meet. This one may be traced from the anterior to the posterior fontaneles. These fontanels gradually disappear, and are replaced by bony structure. In healthy children, at the end of the first or beginning of the second year. That is however, not the case in children troubled with ricketsand in hydrocephalus (water in the head). Then they might remain open a long time. This is instructive to mothers to guard against undue pressure of the head—moulding, shaping, or any kind of violence—heavy, weighty caps to cover the infant's head ; under exposure of heat and cold or rough usage of any character whatever, nor permit curious persons to fumble and feel around inquisitively about the child's head.

MECONIUM AND STOOLS.

The mother's attention is frequently arrested, wondering whether the stools are natural or no, healthy or unhealthy. Almost immediately after birth, the newly born evacuates the contents of the intestinal canal, a slimy viscous matter, of a blackish brown color, almost inodorous and slightly acid, known under the name of *meconium.* Occasionally this evacuation does not take place for three or four days ; in that case an evacuation must be induced by administring a light purgative (syrup of chicory.) The entire mass thus evacuated amounts to about two or three ounces.

During the first two days of its life the infant generally evacuates only meconium ; on the third day that matter is mixed with veritable stools.

Among infants that nurse well the latter stools show themselves already on the second day. Meconium is rendered in several different times in very unequal quantities ; a rapid evacuation is a sign of good alimentation, among infants badly nourished it comes slowly.

The stools of an infant at the breast present the characteristic green aspect on the fourth day, well united and of a moderate consistance ; their coloration is a clear yellow, turns green on the exposure to the atmosphere. They number from two to four in twenty-four hours during the first few days, later from one to two only. Liquid stools, frequent, colored green or mixed with a grumous, cheesy and fat drops, are always indicative of a bad digestion.

CHAPTER II.

THE ART OF RAISING CHILDREN.

THE FIRST CARES TO BE GIVEN TO THE NEWLY BORN.

When the child is born, we must not content ourselves by merely wiping it. Let it be plunged into a basin of tepid water, and dried with a soft, fine sponge. The body is frequently covered with a fatty matter ; in such a case, you may rub the skin with a little oil, then wash and clean it completely

in the bath ; that done, dry it with a piece of soft, old, clean linen, first well warmed, then dress it.

The practice of shaping or moulding the head is not customary among us, yet is it occasionally practiced—and many midwifes do it still. It has been the custom, on the continent, and is still in many districts of Europe. The head should neither be pressed nor moulded though there are those who believe, by doing so, they give the head a more agreeable shape. These manipulations are not only useless, but for the most part dangerous. Let the head be covered with a very light, little cap, that done, proceed to arrange the umbilical cord.

Envelope the umbilical cord in a small compress of fine linen, and place it on the left side of the abdomen. Or better, take a small piece of linen, burn a hole in the center, large enough, then pass the umbilical cord through the hole, which has been burnt in the cloth ; you thereby get an antisceptic action of the charred margins, Over that compress or burnt cloth lay another compress, made of a few folds of linen, making it a little thicker by that means, then place a woolen bandage around its body. Let the bandage be about four fingers wide, which is drawn moderately tight and tied by means of strings. The compresses ought to be changed every day until the cord falls off.

If the naval is red, angry looking, inflamed, it suffices to put a little fine soot on the inflamed part. When the cord has separated, fallen off entirely, place over the naval a little compress of fine linen, of the size and form of a domino, and about the thickness, which is retained in position by a bandage as above described. That is the only means of avoiding umbilical hernia.

In order to make the arms of the infant pass easily into its chemise or into its swaddle, surround the hand with a piece of paper, in the form, say of an old fashioned candle extinguisher, without so much point, call it if you will, "a baby manchette." That prevents the thumb from extending, and in the way when the child is being dressed.

The infant being dressed in its little chemise or swaddling, either the one or the other ought to be provided with strings behind, avoiding the use of pins, put the bandage over that, about two fingers' width below the arm pits, wrapping it around the body without tightening it too much. The lower part of the bandage ought not to be drawn so tight, it should be arranged in such a manner that the child may be able to move its limbs. The arms of the newly born ought never be enclosed in the bandage. So soon as the infant is dressed, it is recommended by many to give it two teaspoons full of water sweetened with sugar, then put it in its cradle, place it on its right side—the right side is preferable during the first few days of its life.

The mother or the nurse ought never have the infant sleep with them in the same bed in consequence of the accidents that are likely to occur: The infant is liable to succumb, inadvertantly on the part of the mother, perhaps; from suffocation, &c. Accidents of this character have happened where little ones have perished in this manner.

FALL OF THE CORD.

That part of the umbilical cord, which remains adherent to the abdomen of the child after section, begins to dry soon after birth, and falls off from about the third to the tenth day.

The fall of the cord and the labor of elimination which accompanies it, exposes the child to several accidents, some of which might prove very serious, such as umbilical hernia, erysipelas and gangrene of the cord, umbilical phlebites and tetanus of the newly born. It is for that reason we must try to avoid it, by carefully dressing the cord—guard against pulling, twisting, and against all causes of irritation. The manner of dressing it has already been described above. Let the cord fall by the natural process, and take care not to detach it prematurely.

FORM AND COMPOSITION OF THE CRADLE.

The cradle generally in use at the present day, combine pretty much all the conditions desirable, that is comfort, hygien and solidity. Whether they be made of iron, wood or wickerwork, they should always be made so as to be somewhat elevated from the floor, supported by feet. Cradles not supported in this manner, but simply resting on the ground; should not, under any circumstances, be used; infants are exposed to humidity of the ground, &c., and within easy reach of domestic animals.

In recent years, cradles have been so constructed as to close entirely, that is to say, the upper portion is so fashioned that it can be lifted up by a thread that is attached to it—it is a sort of hood—resembling those of carriages; in fact, it is a kind of cradle parachute, the nursling is in perfect security.

One or two mattresses of straw, hay, or a little mattress of horse hair, or of varec, composes the bed and forms the base of the cradle covering the mattress

with a suitable woolen blanket or sheet, and proper covering. The sheeting or cotton cloth, out of which the sack is made that covers the straw or hay, should have a longitudenal slit in the centre so as to permit the stirring up or airing of the straw or hay. In case the straw, &c. becomes moist or wet, it is best to expose it outside in the sun or in a current of air. The pillows should always be made of horsehair, varec or hay. Feathers, oil cloth, caoutchouc, sheep skin, old clothes, that are frequently placed under children, should by no means be used, in consequence of the heat, bad odor and humidity, which they maintain in the cradle.

In case there are curtains to the cradle, they should be of light material, of a character not to intercept the passage of air. Care should be taken not to cover the infant too much under thick, heavy covertures. The little ones are mostly in a state of perspiration that not only enfeebles them but makes them susceptible to cold the moment they are taken out of their beds.

Occasionally it will be found necessary to warm the nursling in its cradle during the winter; a bottle of either lead or stone filled with warm water, well secured and wrapped in a piece of flannel, place it at its feet, better at the foot of the cradle. That produces a gentle and agreeable heat, and the infant need not be overhauled with covering. Never place a heated brick or iron in the cradle; the material in which it is wrapped may take fire, thus set the cradle on fire. Such cases have occured, where nurslings have been known to perish by such imprudence.

When the infant gets sleepy, it should not be taken in the arms of the nurse, or placed on the

knees, as is usually done. Put it into its cradle where it is much better off then any where else. Thus the child becomes habituated to sleep in its bed. In proportion as the child grows the less it requires. The nursling should, however, not be continually resting in its cradle; exercise is requisite. This is done by carrying them about on the arm, promenading diverts their attention and gives them strength. The weather being pleasant and agreeable, every opportunity should be taken to have them out in the open air.

CRADLING.

When an infant cries in its cradle, it is better not to take it up at every cry and carry it about in order to quiet it, or make it to go to sleep. It is a habit little ones will contract very quickly, and thus uselessly fatigue its mother. Take care, however, to ascertain whether the baby is not wet, or is disturbed with some other discomfort that may exist, everything being found all right or made so, if deemed advisable, communicate a few slight movements to the cradle, that almost always suffices to lull it gently to sleep. Light, gentle movements imparted to the cradle has in itself no inconvenience.

It is very different though, when the infant is cradled, as some nurses and mothers do, imparting violent and jerking movements, produced by means of a cord, &c. The consequences of which are not easily estimated. The practice of violent and jerking cradleing is always dangerous. During sleep the babe has need of pure air, therefore never place the cradle in some hidden corner or recess.

DIET OR REGIME OF THE NURSLING.

The mother having reposed herself, two or three hours after her confinement, she should present her breast to the infant. Afterwards nurse the little one every two hours and a half, or every three hours. At night give it the breast about eleven o'clock, then in the morning about five. The remainder of the night the little one ought to sleep.

A system: The regulation of an infant's feeding time, so that it gets its meals at certain hours and at fixed determined intervals, is as necessary for the health of the babe as for the health of the mother.

An infant that suckles at every instant has no time to digest that which it takes into the stomach, and is consequently not so good for the child. In order that the milk might be in a condition to nourish the infant, a certain amount of time is required to undergo the necessary processes and changes, to form in the breast of the mother.

During the first three months, and above all the first few days, the mother should only give to her infant the milk of her breast. I pray you to take no heed of gossip and advice, that is very frequently and persistently tendered, they will tell you that the milk is clear, it is not nourishing, that the infant has need of something refreshing, barley water and a number of other mixtures will be recommended, teas and others, such are the very means to inflict ailments—thrush and the like. The milk of a recently confined woman is always clear. It is precisely that wherein the merit lies, and just for that reason that it becomes the infant. I repeat, that during the first few days of the nursling's existence,

to give it nothing else than the mother's milk. It is not until towards the third or fourth month, if she has not much milk, then she may try to introduce the bottle to the infant.

Cows milk, with one-third of pure water, sweetened and slightly warm. Sometime afterwards she may give it pure milk. But during the first five months you will do well to give nothing else to the newly born other than milk. The child at that age is not capable of digesting anything else. While it is not always easy to obtain pure milk, especially in large cities, yet I believe it is to be had, and by careful selection, some honest milkman or farmer may be found that will supply you with the genuine article. Goats milk may be made to answer exceedingly-well, where dairies are not at hand and cows milk not to be had. If however, neither the one or other is to be had, condensed milk can be had recourse to, diluted with water and sweetened. This forms very quickly a fair sort of milk. Besides that milk conserves very well and becomes exceedingly precious, especially to those that are traveling with young children.

Young mothers ought always be provided with a can or box of it, so as to have it ready for use at their homes, because during the night, under the influence of heat, a storm, &c., the milk destined ed for the child may become sour, so that occasionally it may be very embarrassing, and for the moment not know what to give, in order to appease its cries.

Of all the substances that are proclaimed are substances succeeding mothers' milk. These are some that even merit the name. I need hardly call your attention to the fact that newspapers abound with

all sorts of advertisements about this and that sort of food, or substances equal to mothers' milk, or that of the nurse. That it will be found an equivalent for the infant, &c. You may rest assured that most of all the manufactured stuff, so announced, lacks almost entirely the elements of truth. Indeed, for a newly born, there is nothing that so nearly replaces mothers' milk, as that of the cow or the goat.

SELECTION OF A NURSE.

To conscientiously select a wetnurse. The family ought to be guaranteed, as to the abundance and quality of the milk, the excellence of her constitution and above all be well assured that she has never been affected with disease transmissable to the newly born. The medical gentleman in attendance may inspect the milk, in order to obtain an idea sufficient as to its exact composition. The principle organs of the thorax, and abdomen should be examined, explore the mouth and teeth, see if there be any swelling about the neck, in the groin, to give convincing proof of her good health. The development of the muscles of the arms, limbs, &c., color of skin, thus ascertaining the force and figure of her constitution; observe if there are any scrofulous cicatrices. As to the complexion, color of hair, trifling alteration of her teeth. These are secondary considerations and are not of so great importance, nor that the nurse should be of the same age, size and temperament of the mother of the infant which is to be confided to her. While the nurse need not exactly be a beauty, yet let the woman have a pleasant and agreeable expression; nothing repulsive, so that the young mother is

pleasingly impressed with her appearance. Because the nurse has to live with the mother quite a number of months. It is therefore important that the relations and understanding should be perfectly harmonious. A nurse should be good tempered, gentle, good humored, easy, enjoyable and know how to amuse children, all things being equal otherwise, such a one is preferable.

The age of the nurse is not a matter of indifference, the age of between twenty and thirty years, is unquestionably the best, and persons should not be received much below twenty and above thirty, especially when they are beyond the age of thirty-five. For mothers without experience it is better to have an experienced nurse, one that has had several children, consequently familiar with the attention the infant requires. The volume of the breast is not always a guarantee of the abundance of milky secretion; very frequently the great mass is constituted of nothing but fat. Lastly it is not a bad means of judging of the quantity of milk, examine the physical condition of the child of the nurse, be however, well assured that it does not take other nourishment. Watch it nurse a number of times, and observe whether its appetite is satisfied, and whether the bosom conserves a certain firmness. Another exampre, at each nursing the breast yields from three, four to six ounces of milk, but when the quantity is below three ounces it is insufficient for the wants of nutrition.

When wetnurses are employed to replace the mother for the purpose of tending to the wants of the infant, it is usually done for several reasons. Sometimes the mother does not feel disposed, at

other times the mother is not imbued with motherly instincts, often mothers are unable in consequence of either sickness or other disability. All women are not good nurses. They may be either too old, or too young, (age stated above) are ailing, troubled with some hereditary disease, have already nursed too long, have bad habits, not clean enough, &c. I need hardly state that her complexion ought to be clear and healthy, lips natural red. They should not be black, nor bloodless, nor cracked, nor as if the skin was peeling off. No pimples, blisters, such as eruption of any character should be seen round the mouth, nostrils or eyes. nor any deformity of any form or shape. Let her have teeth that are regular, uniform. Don't take a nurse without teeth, they should not overlap each other, project or broken, irregular here and there.

Above all avoid a squint eyed woman for a nurse or a woman with diseased eyes. The body should also be free from eruption, chest. abdomen, knees, limbs, arms, no scales nor scabs should be on either. Let the surface be smooth, soft, clean, clear, free from pimples, rashes, &c. The flesh, muscles, when felt should not be flaccid, flabby to the touch, rather have a solid resisting tendency. The breasts the same. That organ should not be too pendant, wrinkly, skinny, flabby, have the appearance as if they had shrunk; let the breast be globular, smooth, free from spots or cicatrices, and a resisting character to the touch. The nipple should be of medium size, not too long nor too short, but well projecting. When the breast is gently pressed between finger and thumb, a tiny white colored stream will describe a curve, throwing the milky globules quite a distance. Have you ever observed the little nursling place its minature hand upon the full solid gland

stroking it, while holding the nipple between its lips, sucking and smiling with perfect satisfaction. Thus, instinctively the infant gently irritate the gland, so as to make it yield more abundant.

The best time for nursing is about two or three months after confinement, nine or ten months is already too late. A woman enceinte should not nurse, she does wrong inasmuch that she cannot do justice, to both, besides she injures herself. At other times you may observe infants tugging, pulling, sucking at the breast without any profitable result. The nursling goes eager at the breast and leaves it crying, and you ask why? The child receives little or no satisfaction; it is hungry, it works hard without good result. There is an insufficiency of food either in quantity or quality. How often you hear nurses and mothers exclaim: "why it has just been feeding, or it had the breast but a short time since." The truth of the matter is there is nothing or very little to feed on, in fact. The infant in the majority of cases, is simply manifesting by its cries for something to eat, and that of a good quality and plenty in quantity.

Let mothers also remember that the milk fresh, warm, springing from the very fountain of life, and passing through the natural channel by means of that organ- The nipple also warm, supplied with all the structures of vitality, sensitive; by that means this vital fluid passes directly into the mouth of the infant to nourish and comfort it. This very contact, so natural and so sublime between mother and babe has a beneficient influence, we must by no means under rate.

DIET AND REGIME OF HIRED NURSES.

The diet and regime of hired nurses is a matter of some importance. In fact it is of greater importance in this case than in that of the mother, that no overfeeding or other similar imprudence should be permitted. The simple rule in all such cases should be that the woman is supplied with plain and easily digestable food, which, in point of quantity, should be ample, but at the same time. not more than is requisite for the maintenance of perfect health.

If with the view of contributing to the health and vigor of the child, the nurse is plied, as is often the case with strong soups, gruel and stimulating articles of diet, at short intervals during the day, the result is likely to be exactly the reverse of what is anticipated, and the child suffers from over-richness of the milk, while the nurse becomes rapidly fattened. No rule can be laid down, however, as to the diet suitable for nurses beyond this: That a large proportion of their food should consist in the simple and possibly frugal fare to which they have been accustomed.

In this way the danger to which we have referred may always be avoided, but everything will, of course, depend upon the habits of the country or district from which the nurse is procured. The habits of the peasantry and the lower classes in all large towns will require to be taken into consideration in the regulation of diet.

In this country, beer and other malt liquors are not generally used, and are unnecessary when not used; in fact, it may be seen that if a woman cannot nurse without stimulants her assistance may be dispensed with.

In England, however, where the use of beer is almost universal, that to which the women have become accustomed should always be given, as probably, essential to the maintenance of physical condition.

The infant, if healthy, instinctively seizes the nipple from the first and sucks vigorously, and it will suck the finger, if introduced into its mouth the moment it is born. That however, is not always the case. Occasionally difficulties arise from a peculiarity in the conformation of the nipple, which may be either unusually small, or what is more common, has probably without reflection, carelessly been allowed to be pressed in by the dress during pregnancy. That may be remidied by having the nipple drawn out by the nurse, by a strong child, by the breast dump, &c. Care must be taken not to permit the parts to relapse into the former condition. This difficulty is seldom a serious one, it nevertheless requires care and proper management.

Children are sometimes born prematurely, or if at full term, may be weak, thus being unable to take the breast. In these cases the woman should milk her breast into the mouth of the child, when it will generally swallow the milk as it flows; or it may be drained off by the pump and feed the infant with a spoon. The spoon is a bad plan as the child looses the instinct for the nipple.

Among certain classes an idea prevales, when the child has a difficulty in sucking or refuses the breast, it is "tongue-tied;" but that is an error. It does occur, but very rarely that, that malformation exists, should it be met with, a trifling operation is necessary.

FOOD AND PREPARATIONS OF FOOD.

Towards the fifth month or a little later, whether the mother has much milk, or she has at her disposition good cow's milk, let her give her infant, once a day, a little boiled milk, slightly thickened with ordinary flour; then sweeten, not too much; let it be clear and well boiled. Oat meal contains less gluten, and is therefore preferable during the first months to the ordinary wheat flour.

As the child grows older the mother may give it prepared food twice a day. Later still, three times a day, The milk porridge may be replaced by some other simple preparation, such as biscuits or bread, with milk and sweetened with sugar. The bread or biscuit may be grated into a coarse powder with milk and sugar. In the interval, if the mother has not much milk, let the child take cow's milk. Regulate its meals at certain fixed hours, of three or four hours between meals.

In a measure as the child grows older, stop nursing it altogether during the night. Such is the diet the mother should administer to her infant up to the time she is ready to wean it. Mothers must not forget that a considerable number of children become ailing, sick and occasionally die, in consequence of over feeding, or because they have been fed too little, as well as those who are made to eat everything. These are a class of children that are always more or less ailing. Of the many substances that have been employed as substitutes for, or supplemantary to, milk diet in the alimentation of infants, nothing perhaps has attracted so much attention as Liebigs' food.

Unfortunately it is beyond the reach of the humble classes, the ingredients are as follows:

Malt,	1-2 oz.
Second flour,	1-2 "
Skimmed milk,	6 "
Water,	1 "
Bicarbonate of potash,	71-4 grains.

("I may mention here that, after picking out other seed which is in malt, and which may be injurious. The malt should be crushed in a mortar or ground in a coffee mill. Mix all the ingredients together and put them in a pan thoroughly clean, boil for six or eight minutes, stirring all the time; remove from the fire. strain through an ordinary sieve or piece of muslin, and give to the child through the feeding bottle See that the holes in the nipple of the tube are large enough to admit the food passing through them, and that it be not given too warm. The above quantity daily will be found sufficient for an infant for the first few days; but very soon it will have to be increased to two or three cupsful and more.

For a new born child that has to be fed entirely on this food, it should be made at first half milk and half water. Use skimmed milk; new milk is too strong, If properly made, the food should be quite sweet, and taste as though sugar had been put into it; but sugar must on no account be used. The quantity required for twenty-four hours may be made at once, and heated for use as required. Malt can be had at the bakers who use it for making bread. It is dry and slightly crushed, and should be ground fine before using; this can be done in an ordinary coffee mill.")

There are a number of substances used, such as boiled bread and milk, arrow root, corn flour, simple and easily digested substances are extensively employed, depending a good deal upon fancy or prejudice of the nurse.

THE BOTTLE.

Commence to use the bottle towards the fourth month. a little earlier, in some exceptional cases, in order to habituate the nursling to drink cow's milk. The bottle is, in fact, the true auxiliary to the mother's nursing, and is certainly preferable to either cup or glass. But in order that it fulfils in this infantile education. That always salutary role. There are certain rules regarding its use which should not be departed from.

The bottle should be of small volume, ought always be he held or at least supported by the hand. that is the only means of knowing how the infant drinks, and what quantity it has absorbed. The very first quality of the bottle is, that it be simple, not complicated in its mechanism, easy to clean, and that suction be rendered easy. Among other things it should not be expensive, and now are to be had everywhere.

No more milk should be put into the bottle, than the quantity milk necessary for each repast. Contrary to the ordinary usages that quantity ought to be a minimum. (The quantity in the bottle should not be more than from four to six ounces. The bottle should be washed after every meal and fresh milk used for every meal.) The meals taken at the bottle ought, besides be regulated and timed. The same as the nursing at the breast.

In conforming to these rules, the young mother will recognize in the bottle, employed with prudence, an excellent auxiliary to the mother's nursing, and the best means to prepare the infant to be weaned.

In the country, where good milk—pure and vivifying air is to be had at all times—they can raise their children much more easy by the bottle than in the city. It is, however, prudent always to give the breast to the nursling during the first three months; at the outside, at least for four or five weeks. Because it is above all the first few weeks of the infant's existence, that it supports the bottle feeding with great difficulty.

Among mercenary nurses, it is not generally believed that, taking to the bottle that makes children sick or kills them. It is the premature alimentation which almost always plays the mischievous role. Yet, if the bottle succeds among infants that are separated and isolated in the country, it gives disastrous results when employed as a general method in the agglomeration of newly born infants. That is something that should always be borne in mind.

CLOTHING OF THE NURSLING.

Two faults are usually committed in the manner of dressing children.

1st. The swaddling bandage is too tightly drawn around the body of the infant.

2d. They are covered too much. The greater the liberty the nursling has in its swaddling, the more readily it acquires strength and the better it becomes developed. When they are covered too much, it causes the little ones to get into a state of perspiration

that tends to enfeeble them. When the bandage roller is drawn too tight around infants, it compresses the chest and hinders that cavity from developing. Moreover it exercises upon the abdomen injuriously, whereas compression favors umbilical hernia. In a measure as the infant grows leave the inferior part of the swaddling clothes open and loose.

Towards the fourth or fifth month, a little sooner or a little later, depending upon the season and the strength of the child. Put a little dress over the swaddling clothes, then leave the swaddlings aside during the day, and replace them by a fairly large dress, warm and considerably longer than its body. When infants are in dresses, provide them with stockings or knitten woolen socks, then little slippers or shoes well adjusted to their feet so soon as they commence to walk. In as much as the robes are or ought to be longer when they do not walk. They of course ought to be shorter when they make the attempt to walk.

When it is very warm, infants need not have more clothing than a chemise and a robe. The child does not require a great deal of covering upon its head. In fact it is injurious to have the brain overheated, tending to cerebral affections. A skull cap of light material is almost sufficient, and so soon as the child has hair it is well to habituate it to go bareheaded, especially during fine weather.

TOILET OF THE NURSLING.

Cleanliness is the gauge to health for little nurslings. Their toilet should be attended to every day. From the moment it wakes and after it has been fed a little, let the mother or nurse herself, be-

fore the fire, if it is winter, and with a sponge and tepid water wash the little infant from head to foot. Dry it rapidly with a piece of used fine linen previously warmed. Then put rice powder, lycopodium (wolf's claw,) on all parts of the body where the skin is fine and susceptible to be soiled with either urine or fecal matter. Later this bathing can be done with water at the temperature of the chamber.

Most of the waters contains more or less calcareous matter, and the soapy water that is ordinarily used for toilet purposes, it is better after having cleaned the infant, to wash it well with water that contains a few drops of aromatic vinegar, it sweetens the skin of the infant and communicates an excellent odor. A nursling well cleansed ought always to smell pleasant. Every time the infant soils its bed, change it and wash the soiled parts, taking care to powder it each time so as to protect the skin against the irritative action of the urine.

The head of the newly born ought to be cleansed the same as the rest of the body, and brush it every day with a fine, soft camel's hair brush. It ought to be kept exceedingly clean. If there are dirty patches forming or formed, put a little oil on the head; next day pass gently a camel's hair brush over it, brushing always in the same direction, from above downward. From time to time wash the head with soap and water. Afterwards dust a little rice powder on it.

It happens sometimes that the skin behind the ears becomes excoriated. The skin is broken and gives rise to a slight oozing. In order to make it disappear, that is, the discharge, as it should always be stopped, wash the skin with cold water,

and after having dried it, sprinkle or dust a little burned cork powder on it morning and evening. Take care not to put around the ears in this case, as many do, rags greased with butter, &c. In doing so you simply aggravate the evil, and produce behind the ear a veritable sore. So dear to gossips and so useless in a medical point of view.

LOTIONS.

In a measure as the child grows, increases in size, a lotion of tepid water may profitably applied to the whole body. Later on reduce the temperature of the water to that of the chamber, and dry the body with a piece of fine linen, not warmed. That is all that is requisite, all other mixtures with herbs, &c., that are frequently recommended, should certainly not be used.

BATHS.

As a measure of cleanliness, children should become habituated to baths generally. That habit is of the greatest utility is case of sickness. It must not, however, be abused, as is frequently done. The baths ought to be arranged so as to become strengthening to the child. A little salt, soap or a decoction of aromatic plants answers the purpose very well. One or two tablespoonfulls of the salt suffices during the first and second year.

The child ought never to remain in the bath longer than a few minutes. After the bath, dry it well, then, if time permits, let the child have a little exercise in the open air. A child must never be put to bed immediately after a bath; it tends to produce perspiration, except it is given with the intention to calm it during the night. The nursling by

that means obtains an excellent night's sleep. Employed as an hygienic measure, the bath has for its aim to strengthen the child and not to weaken.

In resuming the attention to be given little nurslings and children is: Excessive cleanliness of the body and the head; frequent lotions with water at temperature of the room, baths, light clothing.

Strict cleanliness is essential to the well being of the infant, and the difference between a good and a careless nurse is in no instance more clearly manifest than in the management of the napkins, and protection of the parts from contact of urinary and fecal matter.

Negligence frequently gives rise to troublesome excoriations of that part of the body, it is of the greatest importance that the child should be kept dry and clean. The warm bath is universally used, discretion, however, must be exercised as regards the frequency with which it is employed. Some nurses, after the first few days, undress and bathe the infant, if perfectly healthy, night and morning, apparently with benefit as well as safety. Yet you cannot be too cautious, in other instances, too frequent bathing, produces an exhausting effect; in the case of feeble and sick children, it may only be possible to insure cleanliness by rapid sponging, while the the bath is either avoided altogether or repeated only at intervals of two or three days. During the first six weeks the child should not be permitted to remain in the bath for more than two or three minutes.

FRICTION.

Frictions with aromatic wine, dry friction with a flannel impregnated with the vaporous powder of benzoin or juniper berries placed upon warm cinders

for a short time, constitutes good means for fortifying little children. These tonifying frictions, besides having excellent effect upon the skin, renders children much less liable to the variation of the atmosphere.

THE SKIN, EXCORIATIONS, &c.

The attention to be given to the skin, &c., the redness and excoriations of the skin, that causes the nursling to cry so much, and which frequently deprives it of reposé and of sleep, are almost always due to uncleanliness, and to that bad habit of tightening the swaddling too much.

When children remain too long enclosed in their swaddling especially when too tight, as it has been and is the practice with many persons, the urine and fecal matter being continually in contact with the skin, irritates it. The fundus becomes red and sometimes finishes by ulcerations. The best means of preventing these accidents is to change everytime they soil themselves, and not draw the roller bandage so tight. When the redness of skin, &c., already exists in the newly born, the parts thus red or excoriated must be washed with water at the temperature of the chamber, and strew upon it rice powder, lycopodium or powder of burnt cork.

When there are excorations, the powder of burnt cork must be put on the parts excoriated, by reasons of the tannin that it contains, arrests the oozing almost immediately. Lycopodian is not to be compared with the powder of burnt cork, The former being inert as to its action, besides it has the advantage of not being so expensive. This same powder comes useful for burns, sore nipples; it has a prompt curative effect. Certain nurses tend to have

the skin cut below the breast where the skin doubles during the same season. This same cork powder causes these little accidents rapidly to disappear.

Among children badly kept, or whose changes are not frequent enough, these excoriations become sometimes very extensive. Occasionally nurslings have the skin of the buttocks, thighs, &c., entirely excoriated. Indeed, the surface resembles very much a blistered condition. These children suffer so much that they are scarcely able to nurse. In these cases, which are far from being infrequent, and which makes mothers almost dispair. Fine or course bran should be used, mixed with a little burnt cork powder. But it must not be employed by mere pinches, it is by handfulls it is to be applied, put into the linen of the child in such a manner that the urine cannot come in contact with the skin. A child with most extensive excoriations gets well in twenty-four to thirty-six hours.

All other substances such as oils, pomade waters, fats, greese, which are frequently used, should never be employed, they do more harm than good.

ALIMENTATION.

The only nutrition that is suitable for an infant during the first months of its life, is milk; mother's milk especially. The quantities generally consumed by an healthy infant is:

First day about 1 ounce.
Second day " 5 "
Third day " 15 "
Fourth day " 18 "
After the first month about 21 ounces.
" third " " 25 "

From the fourth month about 27 ounces.
" 6th to the 9th month about 30 ounces.

The only milk appropriate to the need of the infant, is that of the mother's milk or a good nurse; the age of the milk of the nurse ought to correspond with the age of the infant, because a nurse with milk three months' old is already too rich in cheesy matter and fat for the stomach of the newly born.

Recourse should not be had to any other mode of alimentation, except in cases of absolute necessity, because you never deprive an infant of its natural food without some danger. Cow's milk usually succeeds that of mother's milk. That milk contains a greater proportion of cheesy and fatty matter than woman's milk; it is not so sweet, and rapidly turns sour, so it is not really suitable for a child except artificially modified.

The very first milk taken from the cow early in the morning is best for nursing, because it is not so rich in solid matter. Sweeten it suitably and diluted with water in equal quantities. For an infant two months old, one third water, and need not be diluted when it has reached the third month, it might then be given pure.

I must, however, not forget to mention that, in summer time when acid fermentation is so rapid, add to the milk some spoonfulls of lime water or vichy water, &c. The milk will be better retained, and more easily digested. Against the formation of these cheesy lumps in the child's stomach—isinglass, rice, &c., has been recommended.

There are certain preparations of food that have been recommended and pronounced as being a prop

er substitute for maternal milk. They indeed might render some service when the natural alimentation proves insufficient. But they should not become the exclusive nourishment under any circumstances during the first months of the infant's life. The next best to succeed the milk of woman is asses' milk; unfortunately the price is too high, that is not within reach of the masses.

It is not a bad practice to have the child regularly weighed during the first year; every time the scales indicated for several succeeding days a diminnation of weight or only a notable difference between the weight of the infant and its normal weight, you may be sure that the nutrition is not as it should be. If the child is not ailing so as to explain this nutritive trouble. The alimentation must be changed, examine the nurse, change if the milk is insufficient, or it does not become the child, or if it is already weaned, begin again, if possible, with mother's milk. The stools ought to be examined. That also gives important instruction whether the child assimilates its nutrition.

REGIME OF THE MOTHER WHO NURSES.

Some precaution ought to be taken by the young woman who nurses her infant. Good nourishment is an essential condition for a woman that has to support the fatigues of nursing. There is no doubt that aliment of a fatty nature, succulent, beef soup or tea, white meat of fowl, roast meat, mutton chops, &c., ought to form in great part, the principal diet; but vegtables should not be excluded, milk and milk preparation being added.

She should avoid all spiced meats, stews, hashes, sausages, the abuse of salt, pepper, vinegar and all

highly seasoned articles of food as also indigestible articles of diet. The usual drinks ought to be water. This may occasionally changed, coffee, tea, &c., should always be taken with great precaution especially the alcoholic drinks, it is best to abstain from them completely.

As to the number of meals, that will depend generally upon the habits of the woman, and they must be governed thereby. Care must, however, be taken that that the intervals between meals are not too long, nor should the quantity be so great as to render the digestive process difficult.

The mother should have sufficient sleep. That is a matter of importance; rest for body and mind, especially the mammary gland which is the seat of considerable activity.

She should respire pure air, avoid humidity, impressions or exposure to cold, and take a suitable amount of exercise. Tepid baths are useful, but must not be prolonged. The better method of bathing is to wash the body with the hand—that is taking the water out of the basin with the hand, and washing the different parts, commencing with the chest downward.

As to the time of bathing, first thing in the morning, before dressing and before breakfast. The under garments worn during the day should not be slept in, but taken off on going to bed and put on after bathing.

The inhabitants of the country are certainly better off both as regards themselves and their children, as far as the hygienic conditions of frequent sunshine and good atmosphere.

The breast of the mother ought to be protected with care; should avoid nursing in the garden, street, hall or any place where it is cold, draughty, or where it is cold and humid. The unnecessary exposure of the mammae (breasts) frequently brings trouble, inflammation, abscess, &c., by simply neglecting the requisite precaution. The chest ought to be constantly covered with several folds of some material. That will protect breasts, so soon as the covering is humid, it should be changed. When the mammaes are very fully developed, it is important that they be supported by corsets. The gussets of which ought to be large enough, because the weight alone is sufficient to produce pain and other trouble.

In some individuals the milk is so abundant, that when the child sucks on one side, the milk escapes on the other. In order to prevent the linen getting too moist, ladies may take the precaution of placing the nipple in the neck of a flattened bottle, into which the surplus milk can drain.

Finally it cannot be too much insisted upon, that woman nursing should not be troubled mentally, be sad, be disturbed with emotions whether moral or otherwise, annoyances, anger, discord, religious excitement must all be avoided; the influence upon the secretion and the quality of the milk depends greatly on the infant's perfect condition of health.

The mother at that period above all should be calm, collected, kind and gentle. The nervous system must not be put in commotion, by rude and sudden news, especially when they are very sensitive and too easily impressed, it is better under those circumstances to confide the infant to a strange nurse.

Again, a mother should not loose her temper, get into a bad humor, turn topsy turvy at the least cry of the child, it is always an indication that she is a bad nurse. It is very seldom, if these rules are not followed, that the infant is not affected with some derangement in its health, and sometimes it becomes even seriously sick. It is precisely at this time that there is most need of perfectly pure milk for the nursling; and it will not be found in the breast of the mother unless she is, to a considerable extent, master of herself and her emotions.

BANDAGING.

How bandaging is to be done has already been alluded to in another article. I desire to call the attention of mothers and nurses to the evil effects that follows from the foolish method of tight bandaging.

Many women persist in putting around the child's body broad bandages of flannel, old linen, anything. Some old heavy material, drawn as tight as possible, around the child's body. Then secured with any number of pins. When this is accomplished, they are self-satisfied having done as they think, the child an immense service; on the contrary, it is a very stupid piece of performance, by this kind of bandaging both the chest and abdomen are compressed, so as to be actually injurious.

This is not all, however, after bandaging, they feed the child—when the child feeds, give the chest, stomach and abdomen a chance to expand—it must respire freely. If the child's breathing is impeded, the stomach overfilled, very frequently fainting spells are induced and convulsions follow. Tight

bandaging, overfeeding and constipation seldom fails to bring on convulsions.

It cannot be repeated too often—never have the bandage tight, so as in any way to compress the parts and prevent free respiration. Never use pins either in the dress or bandages of a child. Never use a broad piece of material for a bandage, nor old, dirty material. A bandage four fingers wide is is quite sufficient. Moreover, you know not what mischief you do to the internal organs, and the trouble you may bring on by that ridiculous practice.

CHAPTER III.

ATTENTION TO THE HEAD.

A crustlike substance covering the top of the head of the child, called crass, dirt, filth, &c. When a child's head is not properly kept; I mean, when persons do not give the necessary attention to cleanliness, a sort of crust forms in layers, especially on the anterior part of the head, which is nothing more than a mixture of sweat and dust, dirt, caked together, and which is known by various names by certain classes, and held by them in great respect. Contrary to the general prevailing opinions. This crust, scab, dirt, ought certainly not be regarded as either useful, ornamental or healthy. *It is the result of filth.*

It is never seen on children properly attended to, and it is hardly ever seen on children raised bareheaded. The more children have their heads covered, the more subject are they to this horrible crust, sometimes emits a very repulsive odor and always occasions considerable itching. Some of

the old gossips will tell you that this scab preserves the fontanels, that it nourishes the hair, the brain, that it conserves the baptism, &c. Some may think it ridiculous. Sad to say that such nonsense still exists in this the nineteenth century. Yet one hears such stupidity occasionally. This prejudice is inherited, like many others, still flourishing and in full vigor. This crust should not be torn off when it is formed, but it must be removed with care and prevent its formation.

Certain children, carelessly raised, this scab forms a thick crust; that irritates the scalp, and occasionally becomes a veritable malady. Pediculi, (lice) ought no more be respected than this scab. They lodge under this crust, where they multiply and and where they occasion insupportable itching. The child scratches itself and excoriations result. Then ulceration forms and sometimes a fetid suppuration, which exhausts the little patient. Since they have respected this scab and pediculi, they even regard this suppuration as salutory, and some mothers put on the head of their children, cabbage leaves, beet leaves, &c., with several duplicates of greasy linen. Under the influence of that treatment which naturally engenders an excessive heat to the head, the accidents augment, and the scalp becomes nothing more than an infecting wound. When the patient has reached that degree of gravity, which is not rare, the child becomes pale, &c., and finally succumbs from some cerebral affection. Need I say that mothers should know once for all, that neither scabs nor pediculi are ever healthy for children, that it is no preservation against disease. On the contrary it leads to mischief, sickness, and even death.

No matter what degree this malady may have reached, it suffices in order to cure it, to cut the child's hair and shave the head if possible. As to the pediculi, powders can be obtained at every drug store that will destroy them. If there are ulcerations, put upon the head, a layer of the oil of cade which kills the parasite, and dries the ulceration at the same time. The day following, brush the head, always from above downward, with a camel's hair brush; the scab falls off in scales and in a dusty substance. Seldom, that it is necessary to make a a second application of the oil of cade. When this scab has almost disappeared, wash the ailing parts with soap and water, or an emulsion of the oil of cade; or take tar water diluted with tepid water (a spoonfull of tar water to four spoonfulls of water.) Nothing in this case succeeds so well as these simple preparations, If this crust forms anew, a little oil, camel's hair brush, soap, lotion, prevents the return of this malady.

During the treatment of the child, let it be bareheaded. If it be winter, place upon the head a light lace cap. This simple treatment never fails, and does not expose the child, as a great many mothers believe to other diseases. Far from it, when children have once get rid of this filthy scab, it promptly recovers its ordinarily health and strength.

The hair of the child ought to be cut very short, combed and brushed every day. Boys should be raised bareheaded. Little girls might have in summer a simple lace cap; in winter, a hood of a heavier material. Mothers must never forget that cleanliness to the head as well as to the body is a gauge for the child's health.

MILKY SCALL OR TETTER.

It is also known by the name of Porrigo larvalis, eczema in fantile, &c. This is exclusively a disease of infancy. Care must be taken not to confound this milky scall with the scab of the head. It usually appears as an eruption of numerous, minute whitish achores on a red surface, and are composed of pustules of a dirty white color, an elevation of skin with an inflamed base, whence escapes a serosity, that is, they break and discharge a viscid fluid that becomes concret, incrusted and forms a scab, semi-transparent yellowish or green scab.

From these scabs an insipid odor escapes, similar to that of sour milk. It particularly affects the forehead, cheeks, around the mouth and nose. The patches spread, until the whole face becomes as it were enveloped in a mask. Sometime the eruption appears on the neck and breast, and occasionally on the extremities. When it is seated around the eyes, serious accidents may occur. As this scall occasions considerable itching, children scratch and excoriations are produced. The blood that then covers them, gives them a reddish tint; next it turns brown and lastly black. Some children are thus, for a time, completely disfigured.

The fluid that escapes from these excoriations, cause other pustules to spring up on the neighboring part of the skin that explains the rapidity with which the malady propagates itself and extends over the face.

The milky scall almost always depends upon a constitutional condition, due to a bad diet. When the child eats too much, or it has a nourishment that is not in harmony with its age. It is for that

reason that the affection is more frequent at a period of dentition, because it is at that epoch, the skin of children are of an extreme susceptibility, and because at that period generally, there is a great tendency of all sorts of fluxions towards the head. It is for that reason also that, affection is so common among nurslings confided to mercenary nurses.

Very ridiculous notions are sometimes entertained as regards these scabs, among certain superstitious classes. The same may be said of other eruptions; such as that they are useful for the health of the child, &c. That is a prejudice mothers should guard against. On the contrary, make them disappear as quickly as possible for the child's sake.

The means usually employed to get rid of this milky scall, such as grease of all kinds, fatty substances, pomades, medicated waters, will not make it disappear, it will rather tend to propagate them and make them more lasting. Many persons will advise the use of plaster and recommend measures that are more or less injurious. This milky scall may be made to disappear without any danger, modify the diet, regime, alimentation of the infant, if it is not in perfect conformity with the rules of hygiene. These scabs should be continually powdered with dry flour. The child's face ought to be continually covered with flour day and night. That is the only means to calm the itching which is sometimes so acute, as to hinder the child from sleeping. Leave the child bareheaded and have a care to place under its head a pillow of fresh hay or horse hair, &c., avoid feathers, rags, &c.

The flour absorbs the serosity that escapes from the pustles and the progress of the malady is immediate-

ly arrested. Brush this milky scall several times a day with a camel's hair brush and no other, powdering more flour on to it. These frictions calm the itching and releives the child. At the same time give to children according to their age, every morning, a teaspoonfull of Syr. Pansy. By this simple treatment, the crust dries and falls off at the end of a few days, and the child is completely healed. When the crust has fallen off, wash the parts that are red, use rice powder; that will make it disappear. Should the child be constipated, syrup of rhubarb or any mild laxative to relieve its bowels.

DENTITION.

After the child has been vaccinated, the mother is so far quieted, that she has nothing more to expect then the appearance of the first teeth, which takes place ordinarily towards the eight month. Very many nurslings succumb during the period of dentition. The greater number of these children, it is a lamentable fact, die of diseases which is the result of faults committed against hygiene, that might have been avoided if these children had been properly cared for. It is just as well that mothers bear this in mind.

During dentition the child cuts twenty teeth. They are usually known as milk teeth, and are composed of eight incisors, four canine or eye teeth, eight molars or large teeth. These milk teeth, appear in a certain order, and follow each other in a successive manner, so that the work of dentition among infants is not continuous, but offers sufficiently pronounced intervals of repose between the coming of the different teeth, which every mother ought to know; indeed, she should know in advance what

precautions have to be taken at such or such periods of dentition.

Towards the seventh or eight month, a little sooner or later, appear together or at some days interval, the two median lower incisors. Six weeks or two months later appear the two upper or superior incisors, not together but at an interval of eight or ten days or more; then at one or two months' interval, the two lateral superior incisors. The child has cut six teeth.

After an interval of about two months, appear in the interval of time, the two lateral lower incisors and four first molars. The child has now twelve teeth. When these twelve teeth are cut, there is almost always two or three months of repose; then appears the four canine or dog's teeth. The child then has sixteen teeth.

Another interval of three or four months intervenes, when four large molars appear. The child has then its twenty milk teeth. Such is the ordinary run of dentition, the end of which is generally coincident with the termination of the second year; but to the above stated appearance of the teeth. There are numerous exceptions which are for the most part of the time without any gravity. The coming out of these teeth are sometimes slower or more rapid; but there is always a notable repose between the coming out of different sets of teeth. They appear in five successive groups, with appreciable intervals in the work of dentition.

Thus, every time when it is found desirable to vaccinate, wean, travel with the infant, modify its diet in some way. *Never do it during the time the teeth are being cut.* That is to say, during the

coming out of the incisors, molars and canines. It is always best to wait, when the child has cut two, six, twelve, sixteen or twenty teeth, and take advantage of the time of repose. which follows the coming out of each set. By that means you will avoid an infinite number of accidents.

Do not consider dentition a disease. It is nothing more than a dental labor. That considerably augments the susceptibility and the irresistability of children, the most simple matter becomes to them, at that period, a certain cause of sickness, and sometimes renders the slightest affection serious. Some weeks before the apparition of the first teeth, the gums are red swolleu, salivation is abund ant. These phenomena appear in a manner nearly identical with the coming out of the other teeth. The gums are sometimes so painful that the infant refuses to take the breast. They experience a desire to bite, carry everything to their mouth. During that time, all playthings that are painted green or any other color, should not be given to them as they might contain poison. The best are, playthings made of white wood, when a piece of mallow root can be had; of course, I mean the white mallow root, infants may be permitted to press them against the gums. Playthings made of coral are usefully employed for that purpose. When there is pain in the gums, children are often pacified and calmed, by applying a little white honey to the gums with the finger, so as to produce a gentle friction.

Frequently during the work of dentition some infants are pale, lose color, fall off, become thin, soft, neither desire to walk nor stand. They seem downcast, ill at ease, cease feeding, &c.

When the tooth or teeth have come out, these accidents disappear as if by enchantment, only to be reproduced when the new teeth are ready to show themselves. Those symptoms even disappear before the tooth or teeth have pierced the gums.

The accidents most frequent during dentition are diarrhœa, cough, convulsions, cerebral affections. Infants that are teething ought to be submitted to a very severe diet. Their meals should be strictly regulated. They should be protected against the variation of temperature. They should not be taken out at night. when it is cold, nor in the middle of the day, when it is very hot. So soon as the child gets sick, mothers may try a mustard plaster, or a mustard bath, wrap the limbs up warm in flannel or wadding, but by no means wait too long, if it becomes dangerous, some medical man must be consulted.

It is above all during dentition, that children are most subject to milk scall or tetter. These sabs are no more healthy during dentition, than at any other time. On the contrary, they are a great inconvenience in consequence of the itching which they occasion, deprive children of their sleep which at this period they are so much in need of.

Many readers of these pages will, perhaps, think that I exaggerate, believe it incredible; nevertheless, it is true. A large number of women still firmly believe that these filthy scabs are healthy. They will solemnly inquire, whether it isn't healthier now that it is out of the system. This ridiculous prejudice goes still further in many instances. They protect it, and protest against its removal. Some will tell you that teeth come much easier when these scabs cover the head and face.

These prejudices exist in many parts of Europe, and have been imported like many other mischievous prejudices. These scabs in very many instances are the very hot beds of vermin. Cleanliness to the head is the most important. The body should not be neglected. Mothers are sometime very foolish when they come to consult about it. They want internal remedies, medicine, and really feel insulted when soap and water is suggested. Cleanliness is never more necessary than during the time of dentition in consequence of the predisposition of children to convulsions and cerebral affection. Women should know that a dirty child is a disgrace to its mother, whether in a state of sickness or in perfect health.

The skin of the nursling, during dentition, is of extreme susceptibility. Frequently it is the seat of little eruptions, which should by no means alarm the mother, nor should it be taken for scarlatina, as it is sometimes done ; also take care not to employ the numerous quack remedies that will be recommended. Avoid them, it only makes matters worse.

Some children are born with one or more teeth, and frequently it happens that the first teeth do not make their appearance until the second year. The retardition in the dental evolution is frequently an indication of a bad nutrition, and linked with rickets.

Gum Lancing has become quite a fashionable practice among many physicians who are always ready to cut at the slightest irritation of the gums of the child. It must not be supposed that all ailments which may affect the child during dentition, depend upon local irritation due to the eruption of

the teeth; it is nonsense to conclude that all irritation is to be relieved by the promiscuous use of the gum lancet. Such a proceeding is nothing better than a piece a of barbarous quackery.

The infant is made to suffer, and it is useless or mischievous in a dozen instances, for one which it affords relief. So long as the process of teething is going on naturally; the less we interfere the better. Though there may be a slight fever or restlessness. The progress of the tooth to the surface is slow, the tissues which cover the gums are gradually attenuated, and the tooth emerges naturally. Let parents be cautious, lives have been sacrificed in consequence of the too ready use of the lancet. There are certain conditions that admit of the operation, they are recommended as follows:

1st. When the child is suffering and the tooth is nearly through; *that we are sure* that cutting down upon it will at once relieve the tensions and permit the passage of the tooth.

2d. When the gums are inflamed swollen, hot tender, more vascular than usual; then something might be done to relieve the local symptoms.

3d. The occurance of convulsions during one of the periods of active dentition generally.

It cannot be too often repeated, see to the digestive functions, let the diet, regime, hygiene, be well and carefully regulated, as an application to the surface of the gums, a solution of borax with or without the chlorate of potash. The symptoms will generally, in some degree be controlled.

WEANING.

Not a few faults are committed at this particular time. And if a considerable number of children succumb during the period of weaning, it is almost

always the fault of either their mothers or nurses. Just in so much as weaning is practiced with care, at an oppertune time it is inoffensive. On the other hand, premature and untimely weaning is not free from danger.

Weaning a child ought not to be regulated according to its age, but according to its dentition (teething). It would be well for mothers to conform to the following rules as near as possible.

1st. Never wean a child before the coming out of its first teeth.

2d. A child should never be weaned during the work of dentition.

3d. Never wean a child all at once.

4th. A child ought never to be weaned during the summer season.

Common sense should teach that nurslings ought not to be weaned until it is able to take solid food. For that purpose it is necessary that it should have teeth, in order to enable it to reduce its food by biting and grinding, that is about to replace mother's milk. Besides it is unwise to wean a nursling before that period, when accidents of teething so frequently supervene. Occasionally, however, for some reason or another, a child has to be weaned before teething is completed; but, they should, by all means, avoid weaning the child during the time the teeth are penetrating the gums, because that is very dangerous.

Usually, the coming out of the canine teeth, (eye teeth) are more difficult than the others; and we should, if possible, wait until the child has cut sixteen teeth. If that cannot be done, wait to that period of time, when twelve teeth have appeared, or at least six. In that case, wean the child im-

mediately after the coming out of the twelfth or the sixth tooth, because you would have time enough before you, during which teething is entirely suspended. By bearing in mind the above instructions, many complications are avoided. If it is found absolutely necessary, that the child must be weaned, no matter for what reason, wait until the second tooth is out, after that, the period of repose in teething is long enough to accomplish what is desired. The summer season is a bad time to wean a child, better avoid it. Children are often subject to diarrhœa during that season, therefore it becomes dangerous. Springtime and autumn are the best seasons. The winter might be made to answer, only infants are deprived of the means of out-door exercise, which is so beneficial to them.

DIET OF THE NURSLING BEFORE, DURING AND AFTER WEANING.

When it is found desirable to wean the child begin by giving it the breast less frequently; replace each nursing, by milk, a little performance that can be easily accomplished by making the child take to the bottle; be careful not to use either glass or cups; then give the breast morning and evening. During the daytime let it drink milk, or eat prepared food of milk and grated biscuit, or any other light preparation, well boiled and freshly made; feed it at certain hours and well regulated intervals. In place of giving it the breast at eleven o'clock at night, let the mother replace it by milk. The child should sleep the balance of the night. After some little time, give it the breast but once a day, Thus you replace each time the bottle for the breast, by and by you stop nursing it altogether.

In this way weaning may be accomplished without any inconvenience.

But there are an infinite number of circumstances that force mothers to digress from the rules I have given. In order to avoid the greatest of all dangers that is to wean the child at once. It is prudent so soon as the child has reached its fourth month, to begin to accustom the little one to the bottle ; cow's milk, goat's milk once or twice a day ; a little later give it to eat some light preparation of the milk, well cooked once a day. By acting in this manner you are never taken at a disadvantage, when it becomes necessary to wean the child. Take care, however, to act with prudence, do not give it all kinds of nourishment other than milk and milk preparations for some months. This kind of regime also becomes an infant when the mother has not much milk.

A large number of women are in the habit to make their nurslings drink milk, sugar water or some other concoction, in greater or less quantity during the night. That is a bad habit, it hinders children from sleeping and has a tendency to develope a large abdominal cavity (make it big-bellied). A nursling in proportion to its age, should only drink during the night ; say, once, twice or three times at the outside. When it is weaned, the child ought to sleep during the entire night. If the child has acquired these bad habits ; try to correct them in place of giving the nursling its ordinary rations of milk, give it but a very small quantity. If the child cries, let it cry. Depend upon it, the little one will go to sleep in a very short time afterwards. The night following in place of giving milk ; give it sugar water, and pay no attention to its cries.

The third night give it pure water. At the end of two or three nights, it will not ask for drink and will sleep, without waking.

Premature weaning and premature alimentation are almost always, to a greater or lesser extent the most frequent causes of mortality among infants. Many woman labor under the impression, that because a child is weaned early, that it is necessary to strengthen it, give it an abundant nourishment, substantial food, make it eat and drink everything, meat, alchoholic liquors, &c. They know not that this stupid prejudice is not only injurious but causes many children to succumb annually. When a woman has not much milk, or she finds herself compelled to wean her child prematurely, it is only necessary as I have said, that you give it no other nourishment than milk or milk preparations; all other kinds of food is injurious, it is bad.

During the time the child is being weaned its ordinary diet, regime, ought not to be changed. Cease giving the breast only, when you can replace it by cow's milk or milk preparations, an aliment to which it has already got used to. Weaning then is nothing more for the nursling than the cessation of the use of maternal milk and not a sudden change in its manner of living of being nourished. Children are much more impressionable at the time of weaning than under all other circumstances. The skin of the child, its intestines above all, are very susceptible. The greatest attention is therefore required, in all that concerns its hygiene, for the most part you will in this way avoid, those accidents that accompany weaning when it is properly practiced.

After weaning, take care not to change anything in the diet of the child for some days. Only little by little, gradually, that more substantial nourishment is given to the child. Have care not to give the child meat before its stomach is capable of digesting it. I mean before it has teeth for chewing, grinding and preparing its food. Above all guard against giving the child raw meat, which is frequently given under the pretext of fortifying the child, it is by that means you expose it to worms. If you desire to fortify the child after weaning, give it a little soup, broth or some preparation of food containing a little fatty substance, pap made of soup mixed with milk, &c,

Another excellent means of administering to the child animal nourishment, is to mix with it milk soup, beef tea or a small portion of Liebig's extract which is easily conserved during the intense heat. These are the means frequently employed and have rendered great service in many cases.

Before, during and after weaning, a child ought always to take its food in small quantities, besides that nourishment ought always to be in accordance with the feebleness of its digestive organs, always given at certain hours, and well regulated intervals. There is no doubt that the diet, regime of the child, even after weaning has a great influence on its health and its constitution.

DIET OF THE MOTHER AFTER WEANING.

When a woman has weaned her child, let her eat a little less for some few days and take one or two purgatives, occasionally a glass or two of Pulna water answers admirably. Place a little wadding

upon the breast, rub a little camphorated oil upon it, using gentle friction at the same time, and she may take for tea a light infusion of mint. When a woman is weaning, her skin has a certain tendency to moisture. She must take care to cover herself a little more than usual, avoid sudden variations of temperature, especially morning and evening.

It is advisable, for a few days, to keep her room. The fatigue that sometime follows nursing is usually overcome by a good regime, and a visit to the country for a short time, If that does not suffice some little bitters may be taken such as the wine of citrate of iron and quinine, a teaspoonful so as to re-establish the digestive functions.

PREMATURE ALIMENTATION.

It has been well said that premature alimentation not only causes much sickness, but causes many deaths. I may say, nearly as many as all other maladies combined. All other causes of death, whatever they may be, are not so mischievous as the one above cited. Those who have been in the service of foundling hospitals are aware of the fact. It cannot be easily imagined to what extent the carelessness of mothers go in that regard. Every woman ought to know that an infant, during the first few months of its existence, should be fed upon nothing else but milk. Only some months later the child might take with the mother's milk, cow's milk, some light preparations of milk or milk pap, clear and well boiled. Lastly, it ought not and cannot eat until it has teeth. And yet these precepts which have the basis of health of the nursling, are constantally misunderstood by all classes of society.

From the very commencement of life, very many people give their children ordinary cooked food, broth, thickened soups. That is not all, not only do they give them soups, but meat, potatoes, vegetables of all kinds, fats, sausages, wine, beer, &c. All this is done with a view to invigorate the child. Afterwards they let it lie the whole day in the cradle, with an artificial nipple in its mouth, which fatigues it without yielding any nourishment. Crammed with food, reduced to an immobility rolled up in its humid swaddling, dirty, wet mattresses, &c. The nursling is a long way off from being fortified. Its body and its limbs become poorer, thin, its abdomen enlarges. Under its lax and flabby skin, the ribs can be traced, the joints become prominent, the bones of the chest are distinctly seen, as it falls off in flesh these nodosities become more conspicuous, the bony extremities enlarge. To a practitioner accostomed to diseases of children, these symptoms constitute the beginning of rickets, uniformly due to bad, unhealthy, unsuitable diet and alimentation.

Ignorant mothers and stupid nurses attribute this condition to the rapid growth, or to some disease. In order to restore the child to a healthy condition, to invigorate it, they will feed it on everything, no matter whether it has teeth or not, The more the child looses flesh the more they insist on that kind of regime, determined to give it strength, as they think. At last it is attacked with incoercible diarrhœa ; the nursling becomes frightfully thin, reduced to a skeleton, the skin becomes wrinkled, the face assumes the appearance of an old person, and all that is left is skin and bones, Death almost always terminates its slow agony. Such is invari-

ably the result of premature alimentation. The death rate in consequence is large, much larger than a great many people have any idea of.

It cannot be insisted on too much, that a child being weaned, should not be fed upon everything. Take care to begin with the most easily digested aliments and pass inperceptibly to stronger food, so that it becomes habituated to the change by degrees. Among people, where the father and the mother are in the habit of making their children sit at the table with them, they become so charmed to see their little ones eat with a good appetite, that they assist them to everything. The child swallows greedily all that is given to it; but it does not digest it. The lower part of the abdomen, crammed with non-digested food, enlarges, swells out and becomes tumefied, while the rest of the body remains exceedingly thin, and not unfrequently suffers in consequence.

"A voracious child profits nothing but sickness." It would be well for mothers and nurses to reflect on the foregoing, and learn thereby, if that is possible, to nourish and raise their children well, and they should never forget that children that eat too soon, that eat everything, or that are always eating, are never healthy children.

EXERCISE, LIGHT AND AIR.

The want of exercise is so instinctive to the newly born, that so soon as it is freed from its swaddlings, it begins to agitate its arms and limbs. These movements are accompanied with indications of the greatest pleasure. That alone proves how wrong these women are to enclose the arms of their infants in the swaddling. When the nursling is

feeding at the breast, it moves its head on the bosom of its mother, it helps itself so to speak, because the milk flows easier. Feeling, touch is the first sense developed among children. For all these reasons, it is necessary, that it be at liberty to exercise its hands.

Air for the newly born is one of the most important agents of hygine, it is the aliment that maintains its life. Let mothers, therefore, be persuaded that nothing—neither diet, medicines nor remedies —can replace the action of the air in the infant. See to it that you get fresh air, open the windows of their chamber, let air in, and take the child out everytime the weather permits.

The exercise the child takes in the open air is of a passive character at first. Carry it on the arm horizontally on a pillow. As so soon as it has acquired sufficient strength, abandon the pillow and carry it on the arm, sometime on one side and sometime on the other. The neglect of this rule has been the cause, that a considerable number of infants have one leg, a thigh, sometimes the vertebral column more or less bent. When the child is taken out for an airing, cover it in accordance to the season.

As soon as the child is able to sit up, do not leave it in its cradle all the day. Place it on the floor, on the carpet or a mattress, surround it with pillows, then give it some playthings. It will move along from one plaything to another. walking on all fours. After a little while, place chairs before and around it; the child rises and tries to walk, supporting itself on the chairs, when at length it feels strong enough it will abandon the chairs and walk alone without any aid.

When a child begins to walk, from that moment it is necessary to have its dress short. See that you have barriers, for fires, doors, staircases, windows, &c., to avoid accidents.

All the various apparatuses, on wheels or without, that are intended to sustain the child under the arm-pits, to teach it how to walk, leading strings, waggonets, &c., and other numerous means whereby the child is to support itself, and bear the weight of the body upon its limbs before it is strong enough to support its own weight. Children are better off without them, and it is just as well never to employ them.

When you get out with the child, do not raise it by an arm or both arms to make it jump over a gutter, or assist it to get on to the sidewalk. There is always a risk of dislocating an arm or a wrist. It is always safer and better to take hold of the child under the arm pits.

The little carriages in which children are taken out an airing, at the present day, are very convenient, but they are singularly abused. Infants of a few weeks old, should never be put into them, even when they are several months old, it is not at all times advisable. The jerking and concussions which the brain is subject, as yet of no firm consistence, might bring on accidents. When a child is carried in the arm of its mother, it is less exposed to cold, it is upright and yields easily to the movements, by that means it exercises all its muscles. The sight of the surrounding objects, the gesticulations, the words which the mother addresses to it, develops intelligence.

When the child is asleep in its little carriage, it becomes cold, its muscles are not exercised, and as

it almost always sleeps, it does not notice the surrounding objects, and its intelligence does not develope so well, Never use these little carriages when the child is too young, or when it is too cold and never use it at night.

Light and air are as essential to the growth of a child as to that of a plant. Caution in this respect is, however, necessary at first. A dim, subdued light is more suitable, until the organs of vision become accustomed to the new stimulous; in like manner, until the new functions of respiration, and the maintainence of temperature are efficiently and vigorously discharged; take care, however, not to expose the nursling to a variety of temperature. During the summer season, the weather being warm, mild, it may be taken out somewhat earlier, although as a rule, it is better not to carry the child out of doors before the end of the second week. But when it has reached that age, there is nothing of greater importance, or has a greater effect upon the health and growth of the infant, than the daily exposure in the open air, of course dressed according to the requirements of the season.

CHAPTER IV.

VACCINATION.

Eighty-six years ago, vaccine or cowpox, was first discovered by Dr. Jenner, of Glostershire, England, who, by a long course of patient observation, came to the conclusion that persons inocculated with the virus, or vaccine taken from the cow, protected the

individual against that terrible disease, small pox. In 1796, Dr. Jenner vaccinated, for the first time, a child eight years old, with matter taken from the hands of one that milked cows, and who was inocculated by the virus from the cow. The experiment succeeded perfectly, and two years later, after a number of trials had been made, that is in 1798, the results were published to the world. Since, the practice of vaccination has been generally adopted by all nations, and certainly is one of the greatest boons ever conferred upon humanity.

Children ought to be vaccinated during the first months of their lives, re-vaccinated every eight or ten years, and if found advisable every time an epidemic of small pox exists, this constitutes a safe prevention against this fearful malady.

Every child should be vaccinated and mothers ought to see to it they are so; indeed, mothers who neglect that duty, make themselves very culpable, because they voluntarily expose the little one to a disease that is generally fatal. Yetbetterwaitbefore vaccinating the newly born until it has acquired a little strength, it is not necessary to wait until the labor of teething is about to commence. The most favorable age for vaccinating the infant is about the third or fourth month, at four months all children ought to be vaccinated. The cow pox transmitted by inocculation, that is from the cow to the infant, constitutes the human vaccine; to-day it is transmitted from arm to arm. It is the true vaccine, and that only ought to be used in practice; we are not always fortunate enough in obtaining the pure article.

In large cities there are always to be found ingenious persons who imitate and fabricate anything

and everything, and by dint of clever advertising, palm off as the veritable cow pox, some decoction or altered vaccine, which is of no value whatever. The veritable cow pox and the human vaccine, which is the cow pox inocculated to man, ought to be the only vaccine used for vaccination, and re-vaccination. Frequently it happens that vaccine is feeble, through age or exposure that it does not protect, in fact, in most cases proves an absolute failure.

Take care not to have your children vaccinated near or during the time of dentition, because the child is much more impressionable, nor during the summer season, sometimes the intense heat is not favorable and even occasions redness and considererable swelling of the arm, therefore best avoid it. The most favorable seasons are spring and autumn. There is no special precaution to be taken when the child is vaccinated, and it is useless to wrap a number of cloths around the arm or confine the child to the room. Care, however, must be taken to abstain from going out during the time the child is labororing under the vaccinal fever which ordinarily takes place about the eighth or ninth day. It is also necessary to avoid bathing the child during the entire time; the evolution of the pustules, &c., lasts altogether about twenty-five days. There is no occasion to cover the child more than ordinary, and above all ought to be kept exceedingly clean.

It will not be uninstructive for mothers to have some little information as to the general process and appearance of this vaccine disease. After the operation has been performed and the virus introduced into the arm, a slight redness is produced at the point of puncture. In twenty-four hours this

redness disappears, and a slight mark is left at the point of puncture. On the third day after the operation the specific effects of the virus is perceived, a small hard point is to be seen surrounded by a faint redness. This hard point grows larger and on the fifth day, something like a blister is raised.

THE VESICLE, is thin, transparent, contains a pearl colored matter. On the sixth day, this vesicle becomes depressed in the center and is surrounded by a narrow ring of inflammation. This vesicle increases in size to about the eighth or ninth day when it has reached its height. We find the pock at this stage large, almost one-third of an inch in diameter, and projects prominently on the arm. The shape usually is circular sometimes oval, &c., depending the kind of puncture that has been made. On the eighth day the ring of inflammation increases in size, and during the ninth and tenth day forms a brilliant scarlet or dark red circle of almost two inches in diameter. This constitutes the true feature of the vaccine disease. On the tenth day the disease is ordinarily at its height. This is usually accompanied by heat, itching, pain in the inflammed spot, the arm is not willingly moved and feels heavy. Occasionally little or nothing is felt. The disease subsides from the tenth day, the redness fades and nearly disappears on the fourteenth day. The fluid contained in the vesicle dries up, and about the fourteenth day the vescile has disappeared and a scab is formed. This scab hardens for some days longer, which falls off about the eighteenth or twenty-first day leaving a scar.

During the time vesicle is developing, it is better to change the chemise as often as it becomes necessary. It is not at all prejudicial to have vaccine

taken from a child; on the contrary, a service is really rendered. the matter from the pustule is discharged and the inflammation of the arm is diminished. It is therefore in the interest of the little one to have vaccine taken from the arm for the purpose of inocculating other children.

During small pox epidemic, there is no reason why children should not be vaccinated; on the contrary, they ought to be immediately vaccinated. Prejudice exists and persons attribute many sicknesses as due to vaccination, all that is not founded on fact, and in the majority of cases entirely unfounded. Vaccination is always a salutory operation, the greatest care should be taken not to take vaccine from children suffering from specific diseases, or otherwise laboring under disabilities.

The following are the general results which the committee of the epidemicological society arrived at:—

1st. To prove the influence of vaccination in England, it is shown that out of every 1,000 deaths in the half century from 1750 to 1800, there were 96 deaths from small pox; and out of every 1,000 deaths in the half century, from 1800 to 1850, there were only 35 deaths from small pox.

2d, To prove the influence of vaccination on the continent, it is shown that in various states sufficient evidence can be obtained to show that out of every 1,000 deaths, before vaccination was used, 66.5 were deaths from small pox; but that out of every 1,000 deaths after vaccination came into use, the deaths from small pox were only 7.36.

3d. To prove that in countries where vaccination is most perfectly carried out small pox is least mortal is shown that.

(*a.*) In England. where vaccination has been voluntary and frequently neglected, the deaths from all classes being 1,000. The deaths from small pox were as follows:

London, - -	16	Edinburgh, -	19.4
Birmingham, - -	16.6	Glasgow, - -	36
Leeds, - -	17.5	Galwey, -	35
England and Wales, -	21.9	Limeric, - -	41

Perth, - - -	25	Dublin, -	25.6
Paisley, - -	18	Connought, -	60

All, Ireland, 49.

(*c.*) In other countries where vaccination has been more or less compulsory. The deates from all causes being 1,000. The deaths from small pox were as follows:

Westphalia, - -	6	Bohemia, - -	2
Saxony - -	8.33	Lombardy, -	2
Rheinish Provinces, -	3.7	Venice, - -	2.2
Pomerina, -	5.25	Sweden, -	2.7
Lower Austria, -	6	Bavaria, - -	4

Aitken's Practice of Medicine, Vol. 1, p. 408.

CHAPTER V.

DYSPEPSIA.

IMPAIRMENT OF DIGESTION.

In the early childhood, artificial nursing or premature weaning are the most frequent causes of dyspepsia in infancy. Starchy food of every kind of preparation, the use of which is so general as a food for young children, is the most ordinary cause of digestive troubles, because they are not able to digest it, in the early months of life.

Children raised at the breast are less exposed to digestive troubles, than those raised entirely at the bottle, even among them, however, it is not rare. The most frequent causes is faulty diet, or moral violent emotion of the mother or nurse, pregnancy during the time of nursing. Milk too fresh or too old, nurses too frequent and at irregular hours, in delicate children, a difficult dentition, or the invasion of some acute disease, &c.

INDIGESTION. The newly born and children at the breast frequently throw up a large part of the milk after they have drank it; that accident is provoked by the indigestion of a too great a quantity of milk, by the shocks in coughing or by hiccough; that regurgitation has no particular signification and does not provoke any general reaction. In the indigestion proper, on the contrary, the child becomes pale, the features contract, it gets agitated; often it is taken with slight convulsions, such as stiffness of the fingers or some movements as rotation of the eyes; at other times it becomes exhausted and prostrate. The indigestion may terminate rapidly by abundant vomiting of curdled sour milk, or indeed, it may prolong itself; the abdomen becomes hard, tense, painful to pressure; the child is taken with violent colic and evacuates stools that are liquid and very fetid, yellow or green, filled with non-digested lumps of milk.

HABITUAL DYSPEPSIA. When the causes of indigestion continue vomiting and diarrhœa, in place of ceasing rapidly, are repeated for days or weeks and even months. That soon changes the general condition of the child. It looses weight, gets cold easily, color changes, its flesh becomes soft and flabby, the eye looses its brightness, the abdomen is usually distended with gas becomes prominent; from time to time, violent colicky pain, causing the little one to cry and retract its limbs on the abdomen; the stools are frequent and a fetid odor. There is no fever.

TREATMENT—PREVENTATIVE. The best preventative treatment consists, in a proper alimentation, suitable to the age, and to the digestive capacity of

the child ; we have already spoken of this and insisted upon it in another article.

In order to adopt a proper treatment, ascertain first the cause of the indigestion, next it must be removed and remedial measures taken. Supposing dyspepsia follows weaning, put the child upon a milk diet again, and give it the breast if that be possible. Farinacious food is the most usual source of the malady, the use of it must be and is strictly forbidden for the first six months of the infant's life. In case of laborious dentition, regulate the child's diet for a few days. If dyspepsia is caused by too close confinement in the chamber, because it occasionally develops itself where no fault can be found with alimentation, let the child be taken out in the fresh air daily, or a change of air in the country.

The other treatment is very simple, for ordinary indigestion a tablespoon full of lime water in the milk, or clove or cinnamon water by the spoonfull in the milk, or without milk, every ten or fifteen minutes ; place a fomentation on the abdomen from an infusion of camomiles ; warm the limbs, wrap them up in waddling, &c. In case there is colic, if the stools are fetid, a teaspoonfull of castor oil or the syrup of chicory may be given.

Habitual dyspepsia yields very frequently ; indeed, it is considered an excellent remedy for young children, as vichy water, which is administered by the teaspoonfull, serviceable in cases of indigestion only among children above three months of age.

The following cream mixture may be tried with advantage :

Fresh cream, 2 1-2 oz., is equal to 5 tablespoonfulls.
Water, 6 oz., " 12 "
Sugar of milk 1-2 oz.

Add according to the age of the child from 1 oz. to 6 oz. of milk, that is from 2 to 12 tablespoonfulls.

DIARRHŒA.

A frequent discharge of alvine evacuations, generally owing to irritation or inflammation of the mucous membrane under the influence of the most divers causes. The simplest form of diarrhœa occurs more frequently during the process of dentition, it may also happen at anytime subsequent to the birth of the child. Strict attention to the instructions already given will suffice in most cases, and prevent that condition which leads to a more troublesome affection.

Another simple and ordinary form or catarrhal variety of diarrhœa, not of a serious nature, which is most frequent among infants newly born, the large quantities which are sometimes poured out, may reduce the strength of the infant so rapidly, as to place it in a most critical condition in a very short space of time, without any inflammatory indications. Diarrhœa accompanied with vomiting, is much more alarming; the simple diarrhœa is seldom dangerous unless it passes into a dangerous variety.

Diarrhœa caused from inflammation of the bowels (intestines) is especially frequent from about the sixth month to two years of age, that is to say, during the period of dentition, it is always recognized that a corralation exists between the eruption of the teeth and the diarrhœa; many children are very susceptible and diarrhœa accompanies the cutting of the teeth predisposes them to catarrhal condition of the intestines.

All causes of dyspepsia in early infancy might bring on an inflammatory condition of the bowels, especially when the child is submitted to a diet, for which it has not at all the capacity to digest. Thus, when a child is nourished on bad milk or preparations of food, or noxious teas, or the numerous quack medications, women are so ready to experiment with, when a child is not exclusively fed upon milk for the first four or five months, and above all when it is prematurely weaned.

It is generally recognized that the summer heat has considerable influence in producing diarrhœa among young children. The excess of heat is a poison in itself, and has a specific deleterious action on the digestive canal; on others again, the action of heat is indirect, favoring the development of morbid germs, &c. In large cities, in densely populated quarters, the summer heat effects these little ones severely, more especially in crowded tenement houses where the atmosphere is seldom pure, hygiene always bad, noxious sewer emenation filthy sinks, vicious air. This inflammatory forms of diarrhœa has a most disastrous effect upon infants.

The acute form of inflammation of the intestines, diarrhœa commences sometimes briskly in the course of general health, by vomiting, fever, griping colic, as a rule it is preceeded for some days or even weeks by dyspeptic troubles, such as vomiting, flatulence, alternate constipation and diarrhœa, &c. If it is the light form, there are more or less febrile symptoms, such as redness of the face, frequency of the pulse, heat of skin, thirst, loss of appetite. The child suffers in the abdomen, that is manifest by its incessant cries, its agitation, retraction of the limbs, which are drawn upon the abdomen, which is painful, especially about the navel or in one of

the groins, that always makes the child cry out. The stools are frequent, abundant, liquid, yellow at the beginning, slimy, mixed with non-digested chees matter, and sometimes streaked with blood—this turns green.

This state of things may drag along for five or ten days, but under the influence of good hygiene, healthy alimentation, proper treatment, the fever abates, appetite returns, stools dimish in frequency and the child assumes its normal aspect. The child, nevertheless, remains feeble and languishing for some time, and a loss of weight always accompanies this disease.

The appearance of the discharge on the napkin varies greatly, from a watery almost colorless fluid to a slimy matter, which may be frothy or bright yellow, like the yolk of an egg, in other cases, green, mixed with fragments of curdled milk, and possi bly streaked with blood. A more alarming variety, is where the diarrhœa takes the inflammatory or dysenteric form, then it is generally attended with corresponding gastric disturbances, with an increase in the temperature and in the frequency of the pulse, &c.

Treatment. Strict hygiene in the alimentation of the little one; if the child is nursed at the breast, try some other kind of simple nourishment with it. If the bottle is used, the mother's milk, if there be still time, milk and lime or vichy water one-quarter to three-quarters of milk, (that is, 1 teaspoonfull to 3; or 1 tablespoonfull to 3.) If that is still not well digested, try chicken soup, or veal broth; for vomiting, try pieces of ice. In the simple form of diarrhœa, a teaspoonfull of lime water with a little boiled milk or, with mother's milk, frequently has

an immediate effect in arresting it. Should there be the presence of blood in the stools, griping, pain and general inflammatory symptoms, try castor oil with syrup of coffee—or castor oil with one-half drop of laudanum.

The greatest care, however, must be taken in the administration of laudanum to young children. In case the diarrhœa is not arrested, the following remedies may be administered:

1. Black coffee infusion.

Coffee in powder. 20 grains.
Boiling hot water, 2 ounces.

Add a little syrup to sweeten it, two teaspoonfulls to a tablespoonfull; repeat every hour or so.

2. Chalk mixture, - - 2 drachms.
(Pulve Kino Co.,)
Composition of powdered kino, 4 grains.
Water, - - - 1 ounce.
Syrup, - - - 1 drachm.
A teaspoonfull two or three times a day.

An enema like the following, is very useful; take four scruples of the crushed root of Ipecacuanha, boil it in three and one-half ounces of water—until it is reduced to one-half—cool it, strain, and it is ready for use.

CONSTIPATION.

The retention of meconium after birth is regarded with popular prejudice, as prejudicial to the child. That retention is occasionally caused, in consequence of the pasty condition of the meconium, or of the indolence of the intestines, which is frequently to be found among feeble children or those born

before term ; that, however, does not present any gravity whatsoever ; it is seldom retained longer than the third day, or the fourth from the time of birth. and always yields to a light purgative.

The retention of meconium is serious only when it is caused by some malformation of the intestine, of the anus or a contraction of some kind congenital (born with the child) in that case, recourse must be had to some surgical operation.

Constipation is very frequent in early life, principally among children that are raised by the bottle or a prematurely nourished with farinacious food. Obstinate constipation in young children, is regarded by many, as the first precorsary symptom of rickets ; it is most rational to consider constipation and rickets as the result of a vicious alimentation.

A nursling in good health, has during the twenty-four hours, at least two or three yellow stools, of a semi-liquid consistance, one stool per day already indicates constipation. When children have only a stool every two or three days, and the matter is hard, dry, frequently discolored, and covered with streaks of blood, coming from excoriations. Defecation becomes painful and difficult, and takes place only after violent and repeated efforts. The child becoming agitated, gives vent to cries while it lasts, becomes blue and sometimes even presents light convulsive movements, the constipation often results in complications and becomes serious. Habitual constipation also favors the development of umbilical hernia. The abdomen is usually hard, baloon like. and you may feel the hard lumps with your finger.

The general health might remain perfect for a long time ; notwithstanding, all that in the cause of

some little time they become affected, especially children that are raised by the bottle; the tint looses its freshness, the flesh becomes flabby, the sleep is agitated and interrupted by prolonged cries. Frequently in the evening or during the night the child has an attack of ephemeral fever, there are frequent regurgitations, sometimes even vomiting, it may suffer from violent colicky pain, which may be recognized by its cries, its limbs being drawn upon the abdomen. If these accidents are not attended to at once, we find very often the constipation replaced by diarrhœa or even followed by something more serious—inflammation of the bowels. The treatment in young children is almost exclusively hygienic.

When a good nurse can be procured, or cow's milk, mixed with vichy water alkalized before it is given. In some cases weaning is the best means to establish a regular course of stools. See to it that the child is taken out daily, promenading in the fresh air, and avoid as much as possible farinacious food. Soap suppositories or injections of soap and water, and administer from time to time, a light purgative such as the syrup of chicory, castor oil, will frequently suffice to loosen the bowels. In case of habitual constipation, cold injections from two to five times a day, and try one or two teaspoonfulls of codliver oil a day.

APHTHE OR TRUSH.

This disease usually commences as a simple inflammation of the mouth (stomatitis,) but very soon shows itself in the form of small, round, transparent, grayish or white vesicles, and at the base of each is an elevated marginal ring, which is pale and

firm. If the vesicles burst at the end of three or four days; occasionally an exuderation is immediately eliminated and the mucus membrane becomes repaired, but more frequently a greasy kind of deposit forms round them, and a little ulceration or a simple erosion which grows in extent to about three eights of an inch; cicatrices however, and leaves no trace.

The disease chiefly attacks newly born infants, the whole surface of the mouth exhibits unusual redness with here and there cord-like exudation in irregular patches, preceeded by vesicles, especially behind the lips and about the tip of the tongue. The skin is commonly hot or dry; thirst is considerable; swollowing seems to give pain, diarrhœa may ensue to a degree which soon proves fatal. A parasite is usually found in the mouth, known as "thrush fungus," (oidium albicaus.) The general health of the patient is ordinarily not much disturbed and diarrhœa with very offensive evacuations.

TREATMENT.

Wash the mouth frequently with emollient fluid, linseed infusion, diluted glycerine and biborate of soda, or honey mixed with biborate of soda:

Biborate of soda,	-	fluid drachm, 1
Glycerine. -	- -	" ounces, 2
Rose water,	- -	" " 4

To be painted over the lips and tongue with a camel's hair brush.

If there be constipatiou relieve it. In many cases, however, hardly any treatment is needed. When there are these greasy looking exudation, a few drops of ether may be applied.

Tongue Tied. A condition where the bridle-like membrane beneath the tongue, extends to the very tip of the tongue, and so ties it down.

This condition is very much less frequent than is generally supposed, and, in most cases, only exists in the imagination of the child's mother. The anxiety on the part of the mother, (especially in this rapidly moving nation,) when the child does not develop the faculty of speech as early as the mother supposes it should, it is tongue tied. Treatment. Let some skillful surgeon cut it if necessary.

MUGUET.

(Similar to Trush, a disease of the mouth, inflammation, ulceration, &c.

It is a frequent malady in early infancy, its apparition has always a serious signification where it comes on as an ultimate phenomena in subjects exhausted by long diseases. It is generally in the first days of life that this disease develops itself.

It seizes particularly infants badly nourished; it is observed among the newly born whose nurse has milk of a bad quality and those that submit too early to artificial feeding. The use of feculant (starchy) substances, sweetened drinks with treacle or course brown sugar, appears to predispose, especially to this affection. It is, moreover, frequent in the most warm months of the year. It is considered a contagious affection, that is where there are a number of children.

Description. At the commencement of this disease the mucous membrane of the mouth becomes dry, then red and painful, the little eminences (papillae) of the tongue are tumefied. The (cryptogam) lowest form of vegetation appears the

first two or three days under the form of a seed plot of white points, resembling a deposit of hoar frost; these patches are disseminated on the tongue, gums, lips, and the internal surface of the cheek. The roof of the mouth is especially the seat where they are very painful, preventing the little one from nursing, according to the intensity of the disease it remains isolated or spreads rapidly; in intense cases, the muguet soon covers the interior of the mouth and propagates itself to the pharynx.

The concretion of the muguet present a consistence similar to that of soft cheese, of a white color which, under the action of the air, turn yellow or brown, The cheesy deposit is removed with facility, especially on the tongue, but it is rapidly reproduced.

When the malady is not intense, the deposit of vegetation is limited, the other local symptoms often are but slight. The mouth, however, is dry, the introduction of the finger or of a strange body is painful; frequently the child refuses to take the breast, or if taken it quits it; it mumbles continuously and jerks the tongue as if trying to expel some foreign body, no fetid odor escapes as in other inflammation of the mouth, diarrhœa often accompanies this affection.

There is a grave form where all these symptoms are augmented, the child is taken with an abundant diarrhœa, fever and vomiting. The lesion on the roof of the mouth becomes a serious impediment to nursing; an erythema (rash) extending to the buttocks, genital parts and thighs. The child becomes feeble under the influence of the gastric troubles, and might succumb rapidly sometimes the fifteenth day after the appearance of the muguet. At other

times life might be prolonged some weeks; the child might recover.

Treatment. preventative treatment is hygienic attention; the child ought to have a good nurse. In case recourse must be had to artificial nourishment, that should consist of nothing but milk, starchy, floury substances or treacle, &c. should be forbidden. Wash the mouth out with care each time after it has nursed. Local applications, anoint or wash the cavity of the mouth with a mixture of borax and honey, equal parts, or better, a solution of borax and glycerine.

The muguet once developed, it is still by hygenic care that the end must be combatted; if the child has been artificially nursed, provide a nurse for it, if the nurse is bad change her. Vichy water or lime water can be used as a wash, may also be taken internally. The diarrhœa must be combatted. (See article on diarrhœa.)

CONVULSIONS OR ECLAMPSIA.

Convulsions is an excited irritabilty of the nervous system, producing a spasmodic phenomena of muscular activity, which is characterised by alternate contraction and relaxation of the muscles of the body, independant of the will, and at the same time powerless to suspend or moderate them.

Predisposing Causes. Early childhood is of all other predisposing causes of convulsions, the most manifest and the most general. They are very frequent in the first two years, it becomes rare after five, and exceptional after seven years.

Convulsions also occur as the result of an hereditary predisposition.

Convulsions also occur from debilitating causes, diarrhœa, spontaneous and profuse hemorrhage venesection, leeches, venerial diseases, insufficient feeding or bad food, that have a tendency to impoverish the blood and alter the general nutrition of the tissues, tend to augment the exciting power of the spinal cord (the nervous system.)

Certain affections tend to produce this nervous disturbance, scarlet fever, measles or small pox, in high fevers, &c.

In teething from the irritation of the nervous terminations, intestinal worms, indigestion, painful injuries to the skin, like burns, or from applications of blisters or mustard plasters, &c. Stone in the bladder, retention of urine, all these causes are said to be "reflex convulsions," also from suffocation by breathing bad air, uraemira, (bloodlessness), &c.

Symptoms. An attack of convulsions burst forth sometimes suddenly, at other times it is announced by some percursary phenomena; the sudden invasion, without any precursary symptoms are said to be the most frequent.

These precursary symptoms are sometimes remote, at other times immediate. Among some of those that might precede several days before the appearance of the convulsions, are sleeplessness, loss of temper and drowsiness; among the second the more frequent are an excessive agitation, a pulse hard and vibrating, a wild scared expression of the face, trembling during sleep that wakes the child suddenly. Certain involuntary movements as a peculiar stiff, grinning smile, and movements of rotation of the eye.

The Attack. When the child is taken with convulsions, the gaze, which was natural, becomes fixed; the eye expresses terror; then the globe of the eye is rapidly agitated by jerking movements which is directed upwards towards the upper eyelid; it becomes afterwards momentarily fixed, for soon to be impelled by disordered movements, now to the left, now to the right. The squinting is at this moment more pronounced. The pupils are sometimes dilated, sometimes contracted, and when the iris is entirely hid by the upper lid, nothing but the white of the eye is perceived. The agony of the face gives it an aspect characteristic and frightful. At the same time the muscles of the face enter into play, the face is grimacing, the corners of the mouth are drawn outwards and upwards jerking movements, producing with each shock a peculiar noise, resulting from the passage of air in a kind of tunnel that is formed by the corners of the mouth; frequently frothy saliva or slightly bloody, cover the lips with a white or rosy foam. The upper lip is dragged upwards, giving sometimes the mouth the shape of certain rodents; the lower jaw is agitated by the same movement; at other times there is lockjaw, interrupted from time to time by grinding of the teeth. The head is usually strangely carried backwards, seldom laterally or in rotation. The fingers are flexed into the palm of the hand with stiffness, the forearms carried on to the arm, are incessantly agitated by the jerking of semiflexion and semi-extension; at other times, the wrist joint passes from one movement to another (turning of the hand from the upper surface to the palmer and palmer to the upper). The arms are seen, moving in different directions in an odd and unexpected manner. The same symptoms are observed at

the lower extremities, but they are gene pronounced.

If the convulsions are very violent, the urine and feces escape involuntarily ; but that is not very frequent. The deglutition (swallowing) is very rarely impossible ; the intelligence is almost always abolished, and the sensibility is null ; the other senses are often impressionable. Thus it is frequently seen that a child signifies its displeasure when it is made to smell salamoniac or other odors. When the convulsions are prolonged the face is violet, covered with perspiration, burning heat of the head, whilst the extremities are cold. The skin is moist, the pulse is small and acellerated, difficult to count, often effaces by muscular contraction ; the startling of the tendons, the respiration is a little quicker, noisy and snoring only in the case of great gravity.

The duration of an attack of eclampsia varies considerably, depending upon the cause and the circumstances that produced them. Sometimes convulsions cease at the end of a few minutes, sometimes hours elapse before they disappear, be it all at once, be it by degrees. Convulsions from suffocation (asphyxia) are frequently partial, incomplete and alternating with coma (profound stupor.) The initial convulsions of fever, are intense and generalized, but most frequently confined to one access. Convulsions from blood poisoning (uraemia,) are remarkable for their violence, by the repeated and continued attacks (a bad condition) and by coma, (a profound stupor, sleepy condition from which it is extremely difficult to rouse the patient.) A convulsive attack is often followed by a complete reestablishment ; the usual return to health is slow.

Intellectual troubles may be ranged as a possible consequence, idiocy. paralysis and contraction of the limbs. that have been the seat of the convulsive movements.

Treatment. When an attack of convulsion commences, or has already begun, see that everything about the neck or the body is removed, so that nothing can impede the natural function of breathing. Next, place the child upon a large bed so that it shall not be in danger of wounding itself; at the same time, let fresh air into the chamber—prepare a warm bath or tepid water, plunge the child into it—taking care, however, in wetting the head with cold water, a sponge dipped in cold water and gently pressed over the head. When the little one has come to itself if the child is constipated, has had no stool perhaps for a day, and the abdomen is tense and full, give it a little castor oil, or syrup of rhubarb or enema (injection) of castile soap and tepid water with a little salt, or with a little olive oil or castor oil. And the following medicine may be administered.

BROMIDE OF POTASH.

A child under six weeks old, 1-4 grain.
" " three months " 1-2 "
" one year " 1 "

Add one grain additional for every year. Dissolve it in a little water.

In all mild cases these simple remedies will calm the storm of convulsions.

Should, however, the convulsion be more severe, and the remedies above indicated have no influence in checking it, the important remedy to be tried is chloral, in the manner following:

A child, newly born, -	from	1-4	to 3-4	grains.
A nursling, - -	"	3-4	to 2	"
A child from 2 to 6 years,	"	3	to 4	"
" " 10 to 12 "	"	6	to 8	"

These doses are repeated at intervals of a quarter to one-half an hour, until sleep is obtained without convulsions. It must, however, be suspended, no more must be given under any circumstances when the breath begins to exhale the odor of chloroform.

When the convulsions arise from fever, accompanied by a considerable elevation of temperature, a *cold bath* is the soverign remedy, and may be given when convulsions arise from indigestion, cause the child to vomit, and a very simple means is always at hand, that is tickle the throat with a feather. That frequently suffices, or Ipecacuanha may be given as a vomit.

The powder, from five to fifteen grains.

If convulsions arise from *worms*, or from *teething*, or from a *bad nurse*, or from artificial *indigested food*, or from inflammation of the *bowels*. For worms, the medicine already indicated—teething the gums may have to be lanced, &c.

Of course, if the child suffers from constipation caused by dyspepsia, something must be given to relieve it—syrup of rhubarb, castor oil. If there are, however, from constitutional causes, such as rickets, &c., the treatment must be in accordance, codliver oil, carbonate of iron, &c.

JAUNDICE.

Jaundice is a yellow discoloration of the skin, that is occasionally met with among the newly born. That discoloration may be due to congestion of the blood during the first few days of the infant's life.

or the presence of some billary pigment in the smallest blood vessels (the capillaries) of the skin. It may also be due to prolong compression of the infant during birth, it occurs sometimes among women who become mothers for the first time ; it is more frequent among feeble children than the healthy and vigorous; not uncommon among infants in foundling hospitals. It has also been attributed to the retention of the meconium of the newly born.

Sometimes Jaundice appears several hours after birth. but the yellow coloration of the skin and the eye (the conjunctive) becomes marked on the second or the third day. It is very rare that children are born jaundiced, the yellow tint augments in intensity for several days without being very strongly marked. and disappears little by little from the eight to the tenth day, in some instances it persists for several weeks ; in other cases, still more rare it diminishes at the end of three or four days, only to reappear with greater intensity. The stools are usually colored. This sort of jaundice is essentially benign, disappears spontaneously and alters the general health but little.

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